Making Work Pay in Bangladesh

Employment, Growth, and Poverty Reduction

Pierella Paci
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THE WORLD BANK

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EMPLOYMENT
AND INCLUSIVE GROWTH

Cover Photo: *Daily Laborers with Baskets Unloading a Boat, January 2008*
by Pierre Claquin
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Acronyms and Abbreviations

ADB	Asian Development Bank
BBS	Bangladesh Bureau of Statistics
CPI	consumer price index
EPZ	export processing zone
FDI	foreign direct investment
GDP	gross domestic product
HIES	Household Income and Expenditure Survey
ILO	International Labour Organization
ISIC	International Standard Industrial Classification
MFA	Multi-Fiber Agreement
REER	real effective exchange rate
RMG	ready-made garments
SNA	System of National Accounts
TFP	total factor productivity

Introduction and Overview

The objective of this report is to analyze the important roles of labor markets, employment, productivity, and labor income in facilitating shared growth and promoting poverty reduction in Bangladesh. First, the report provides a background discussion of poverty, reform, and growth in Bangladesh. Following that, it gives an overview of the labor market, describing the country's demographics, the institutional structure of the labor market, and the labor market indicators. Then a poverty profile of the labor market is developed, followed by a discussion of the income sources and a decomposition of poverty reduction. A number of selected issues are discussed in the final section, including rural versus urban conditions; women, and children in the labor market; self-employment and household employment; and socioeconomic inequalities.

The present study is part of the Poverty Reduction Group (PRMPR) of the World Bank's broader program on employment and shared growth and is linked to the Bangladesh Poverty Assessment 2008. The focus of the report is on the period 2000–05, because this was the period in which Bangladesh witnessed a spectacular decrease in the extent of poverty, in which the labor market, employment, and productivity played an important role. In addition, relatively good data were available for this analysis.

Summary Findings

The following are the main findings of this report:

- Urbanization and the associated expansion of the services sector have recently taken over as key factors shaping the development process in Bangladesh. This brings new challenges to the poverty reduction effort.
- The relatively flexible and gradually broadening labor market is likely to facilitate the economic transition for the country.
- Although job creation has been an important factor, recent increases in income per capita and the recent reduction in poverty have been linked predominantly to rising productivity in employment, rising wages, and rising labor income. Most of this poverty reduction has taken place within the economic sectors, rather than being associated with movement of the poor out of the sector where they were.
- The main determinant of labor market and poverty outcomes is endowment in productive assets—both physical capital and human capital. Additional investment in these assets is necessary, as is an environment conducive to higher returns to these assets.
- Women are playing an increasingly important role in the Bangladesh labor market; however, their contribution remains small because of traditionally very low levels of participation.

Organization of the Report

The structure of the report is as follows. Chapter 1 describes the nature of economic growth in Bangladesh during the past three decades, focusing on the reforms that led to the recent growth acceleration, and discusses the poverty reduction record up to the present. It also introduces the data used in this report to analyze the links among employment, earnings, and shared growth.

Chapter 2 presents the main features of the Bangladesh labor market, including demographic developments, the institutional underpinnings of the labor market, the investment climate for firms, and the sectoral composition of employment, as well as the general trends of the key indicators.

In chapter 3 the links between poverty and the labor market are explored. The chapter looks into the sources of income and develops a labor market poverty profile. By decomposing income growth and poverty reduction into components, it attempts to find which sectors were

growing and whether poverty reduction took place as a result of sectoral shifts in employment or through growth within sectors.

Finally, chapter 4 discusses several topics important to a better understanding of the functioning of the labor market in Bangladesh and its link to poverty reduction. These topics include multiple income sources, labor market segmentation, self-employment, and inequality, plus rural and urban issues, women in the labor market, and child workers.

Background—Poverty, Reform, and Growth in Bangladesh

At the time of independence in 1971, the challenges could not have been more daunting for Bangladesh—a country damaged by war, poor in the extreme, and overpopulated. Yet since that time Bangladesh has made impressive progress on the development path. With few natural resources, the country has always depended on the hard work of its people.

Growth through reforms

Throughout the years Bangladesh has been steadily improving its economic performance. After years of relatively unimpressive growth rates (averaging 3–4 percent in the 1970s and 1980s), growth accelerated significantly over the 1990s to more than 5 percent annually, and this respectable performance continues into the new millennium. In per capita terms, this has meant a tripling of the growth rate from about 1 percent (pre-1990) to 3 percent (post-1990; see figure 1.1).

It is hardly a coincidence that a switch to a higher growth regime at the beginning of the 1990s happened concurrently with the implementation of far-reaching reforms. These reforms included a political democratization, a deepening of earlier reforms (which included deregulation in agriculture and in industrial product markets), macroeconomic stabilization, and trade liberalization (World Bank 2006).

Macroeconomic stabilization

Since at least 1990 Bangladesh has been pursuing sound macroeconomic management. The fiscal record, albeit somewhat mixed, has been favorable. With deficits kept under control at about 4–5 percent of GDP and with occasional slippages ultimately corrected, public sector debt has been contained below 50 percent of GDP. Revenue mobilization (at about 10 percent of GDP) is weak by any standards and is only partly

Figure 1.1   Growth and the Macroeconomic Environment in Bangladesh, 1980–2005

(a) GDP growth, five-year averages

(b) inflation, five-year averages

- GDP growth
- GDP per capita growth

- inflation

(c) REER, five-year averages,
    deviation, 2000 = 0%

- REER
- +/- 1 standard deviation
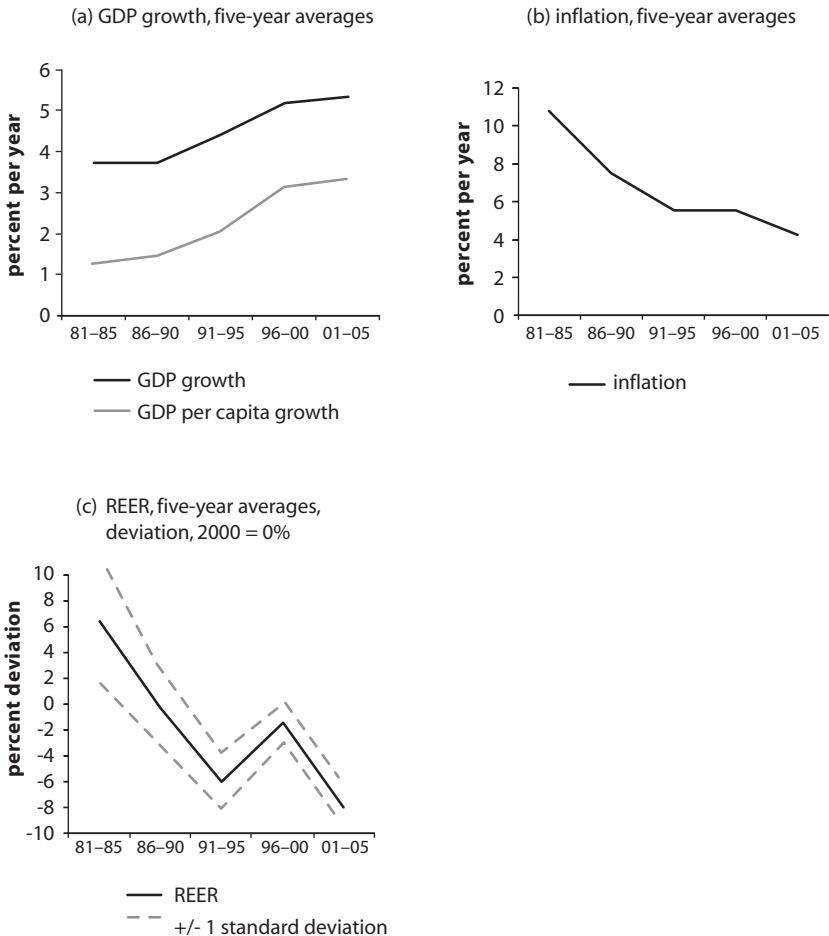
Sources: Bangladesh Bureau of Statistics (BBS), staff estimates.

Note: REER = real effective exchange rate.

balanced by a favorable pattern of public expenditures, in which a third of the total budget (or about 5 percent of GDP) is spent on education, health, and social protection (World Bank 2003a, 2006). Inflation has been brought down to single digits and has been maintained at this level through a combination of controls on money growth and prudent exchange rate management.

The currency, the taka (US$1 = Tk 68.9, 2007 average), was made convertible (for the current account) in 1994 and managed under a "flexible peg" exchange-rate arrangement until 2003, when it was allowed to float freely. Over this period the policy preference seems to have been for a stable real exchange rate, and this objective has been generally achieved. More recently, in the 2000s, the taka has been depreciating steadily, partly to accommodate the general depreciation of the currencies of Bangladesh's neighbors in Asia.

Growing export receipts and a strong inflow of remittances are helping to finance rising needs for imported investment and consumption goods, so that, overall, the external current account has been oscillating around balance for the past decade, which contrasts with an average deficit of about 2.5 percent during the 1980s.

Trade liberalization

After decades of protectionism and inward orientation, in the 1980s, Bangladesh started to remove the antiexport bias embedded in its trade policies. This process gained momentum in the early 1990s, driven by the objective of enabling the economy to take advantage of the preferential access to U.S. and European markets for ready-made garments (RMG) offered under the Multi-Fiber Agreement (MFA) and the Generalized System of Preferences. By the end of the 1990s, most quantitative restrictions on imports had been eliminated and average nominal tariffs had been reduced from over 100 percent to about 20 percent (World Bank 2003b), giving businesses access to cheaper imported inputs for production.[1] Exchange rate controls have been relaxed, and the government has offered incentives to set up firms in export processing zones (EPZs).

This outward orientation has yielded impressive results. Following a relative stagnation in the 1980s, export has been growing on average at double-digit rates, increasing threefold to 15 percent of GDP in 2005 from 5.5 percent 15 years earlier. Moreover, its composition has shifted from primary products (e.g., jute) toward ready-made garments, knitwear, shrimp, and leather products (World Bank 2003a).

RMGs is the largest exporting sector, earning over US$6 billion per year (about 10 percent of GDP) and accounting for 75 percent of export receipts. With the phasing out of the MFA at the end of 2004, the RMG sector is bound to come under intense competitive pressure from other RMG exporters, such as China or Vietnam. Although no factory closings or job losses have been observed to date, in the longer run concerns as to

whether Bangladesh will be able to withstand this pressure and reinvent its export competitiveness are very relevant (IMF 2005).[2]

Stable, broad-based growth driven by private sector investment

Prudent macroeconomic management, greater openness and integration with the world economy, and deregulation and market orientation have provided a favorable environment for stable, sustained, and broad-based economic growth. Indeed, the volatility of GDP changes in Bangladesh has been one of the lowest in the world (World Bank 2004). This income stability is particularly beneficial to the poor, who usually have fewer means of coping with shocks (World Bank 2003a).[3]

A notable feature of Bangladesh's growth process, as national account statistics reveal, is its broad-based nature. This means that all sectors—agriculture, industry, and services—contribute to growth almost proportionally to their shares in GDP (see figure 1.2). Over the longer term several trends are evident, however. The share of the agricultural sector is gradually shrinking; it has declined from about 30 percent of GDP in the 1980s to about 20 percent currently. Industry (including construction) has been consistently overperforming, recording robust growth from about 20 percent of GDP in the 1980s to about 30 percent currently. Within industry, the manufacturing sector (thanks to the expansion of RMG exports, which currently account for 17 percent of GDP) and construction (currently 8 percent of GDP) have been key drivers. The growth of the services sector, which accounts for a stable half of GDP, has generally mirrored GDP growth. Per capita growth rates have been relatively uniform across the regions (World Bank 2006).[4]

On the expenditure side, external demand (export) has been seen as instrumental in the expansion of industrial production. However, it contributed only about one-quarter of incremental GDP growth over the past decade, which leaves three-quarters to be explained by domestic demand directed toward domestically produced goods and services.[5]

As regards growth accounting, the economic expansion has been driven primarily by factor accumulation. Capital stock growth accelerated from an average rate of 4 percent per year over the 1980s to 6.6 percent over the past 15 years. The growth rate of effective labor—measured as a combination of the labor force size and the education levels of the working-age population—also picked up by almost 1 percentage point (to about 3.7 percent per year) in the latter period. Though improved access to education has played a role, the dominant factor in this increase has

Figure 1.2   Sectoral Composition and Sources of Growth in Bangladesh

(a) sectoral shares in GDP,
five-year averages

----- agriculture
——— industry (and construction)
——— services

(b) contribution to GDP growth,
five-year averages

----- agriculture
——— industry (and construction)
——— services

(c) investment (percent of GDP)
five-year averages

----- private
——— public
——— total
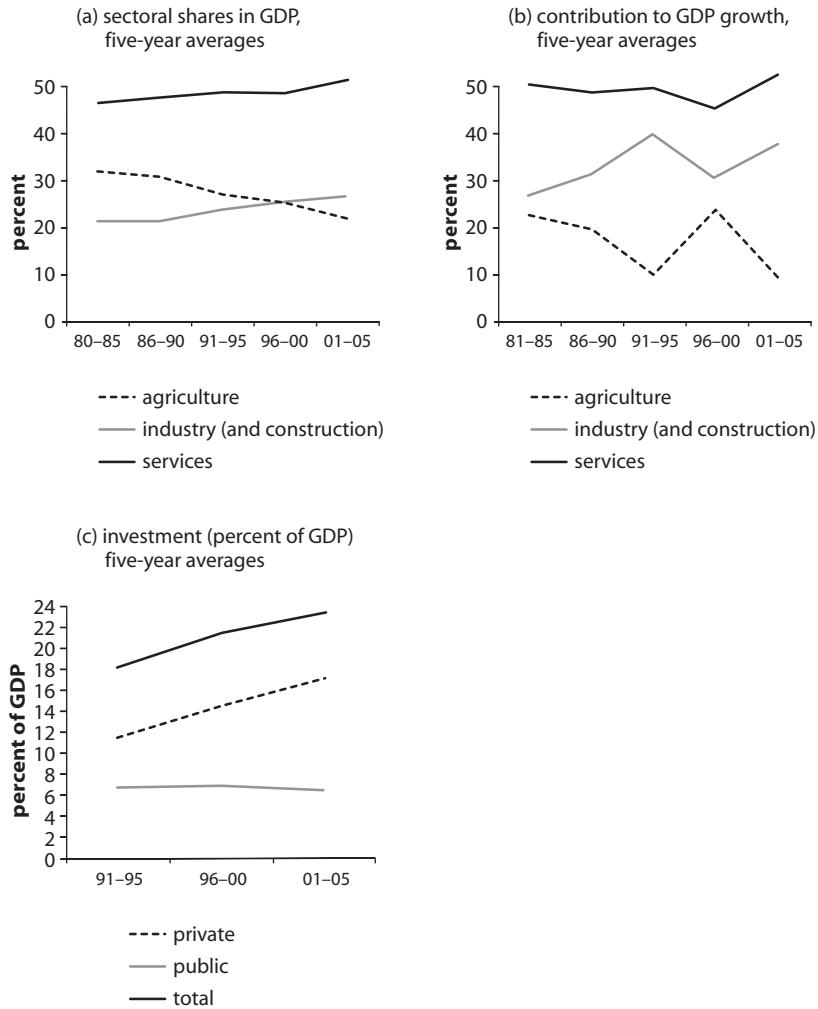
Sources: BBS, staff estimates.

been robust labor force growth. The contribution of total factor produc-
tivity (TFP), which measures the efficiency with which capital and labor
are used to produce output—at less than 0.5 percentage points—has been
almost negligible (World Bank 2006).

Finally, it is investment from the private sector that has enabled the economy to build its increased productive capacity. With public investment unchanged at about 6.5 percent of GDP over the past 25 years, private investment, facilitated by a stable and more market-friendly environment, surged from a little over 10 percent to almost 18 percent of GDP over the same period (see figure 1.2). This growth has been financed entirely from the increased domestic savings, and the availability of more foreign export earning from RMG has made it possible for domestic firms to bring in more imported capital goods. The potential of foreign savings (e.g., in the form of foreign direct investment) remains underutilized.

Poverty in Bangladesh

The progress made in poverty reduction in Bangladesh has been impressive. Poverty rates (measured by consumption) declined from 70 percent in the early 1970s to 40 percent in 2005 (see figure 1.3). Throughout this period, but particularly in the earlier years, agricultural development has been a key driving force of poverty reduction. The deregulation and liberalization of markets stimulated agricultural entrepreneurship and resulted in the rapid spread of farmer-owned and -operated small-scale irrigation and the adoption of high-yielding, and more resilient, crops. The impressive improvement in the availability of grain contributed to a

Figure 1.3   Poverty in Bangladesh, 1991–2005
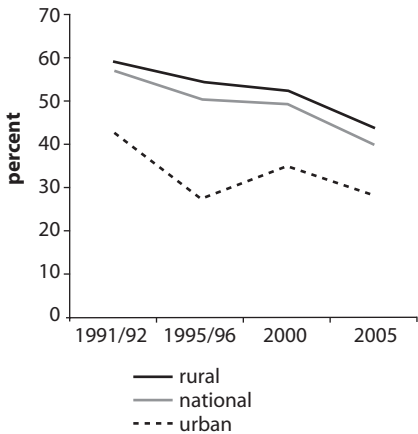
Source: World Bank 2007b.

decline in real prices of staple foods, which in turn greatly benefited poor households, which are predominantly net buyers of food in Bangladesh (Klytchnikova and Diop 2006).

The country has been very successful in improving the nonincome dimensions of the living standard of its population. Life expectancy grew from 46 years in 1975 to 61 years in 2000, infant mortality fell from 140 (deaths per 1,000 live births) in 1972 to about 60 in 2000, and total fertility rates declined from 7 (children per woman) in 1975 to 3.2 in 2000 (Sen, Mujeri, and Shahabuddin 2004; World Bank 2003a, 2006), which helped to slow down the booming population growth. Primary education has been made free and universal, and enrollment has increased significantly. The gender gap has been closed in primary schools, and secondary education for girls is being actively supported. In addition, access to water and sanitation has been improved (World Bank 2002).

Political commitment to human development has been a crucial factor in this social progress. Budget allocations to health, education, and social protection have doubled and account for a third of government expenditures. In an important action, the state promoted social entrepreneurship by providing scope for many nongovernmental and community-based organizations to develop and deliver services to the poor. Good policies—such as the emphasis on female education and women's empowerment, a successful population control campaign, a focus on rural infrastructure, the provision of social assistance to the poor and to those affected by natural disasters, and the adoption of microcredit schemes—have all contributed to better social outcomes.

The fact that much of the poverty reduction took place in the slow-growth years has led to claims that it is possible to improve living standards by means other than economic growth alone. On the other hand, it is only since the growth acceleration of the 1990s that poverty reduction has resumed vigorously after a period of stagnation during the 1980s. In the 1990s poverty reduction was led by the increasing of wages and employment opportunities in the rural nonfarm sector, as well as by the expanding of the manufacturing sector, including RMGs.

Despite this progress, enormous challenges remain. For example, the absolute number of poor, about 60 million, has not gone down significantly over the past three decades, as population growth and some increases in inequality have diffused much of the gains. Child malnutrition is still among the highest in the world, half of the population is illiterate, and per capita annual income is only US$380.

Between 2000 and 2005, poverty reduction appeared to accelerate even further. Over this period the poverty rate decreased by almost 10 percentage points, from 49 percent to 40 percent—that is, to the point that the absolute number of poor actually began to fall (in the past, the number of poor people has been only increasing). It is only now that the sources of these recent positive developments are being rigorously analyzed, and this report attempts to provide an understanding of the role that labor markets, employment, and wages have played.

The Data and Definitions

This report uses the term *earnings* to describe labor income, including net revenues from self-employment and self-consumed own-source production. The definition of *waged* and *salaried* employment follows the Household Income and Expenditure Surveys (HIES).[6] This report uses the terms *self-employment* and *household enterprise* interchangeably, regardless of whether they relate to individual self-employment or an enterprise consisting of several members of the family or an employer. The term *wage* is normally used to describe labor income received by waged and salaried workers per unit of time (here, an hour). The term *hourly rate* is used for the same concept in the case of self-employment. The term *wage* is sometime used more generally, to mean earnings per unit of time. *Employed* is used interchangeably with *worker*, and includes both waged and self-employed workers. Regarding economic sectors, *industry* is used to indicate mining, manufacturing, and utilities, plus construction. Because with the data available to this study it is not possible to measure labor productivity directly, the term *productivity* is used in a somewhat imprecise manner to denote value added per worker or earnings per worker, depending on the context.

There is no single consistent data source that contains all of the necessary information for analyzing the links among growth, employment, productivity, and poverty. Specifically, information on economic growth is derived from the System of National Accounts (SNA), while information on employment and labor income comes from the HIES. Estimates of poverty are also derived from the HIES but are based on the consumption aggregate rather than the income aggregate. Therefore, it is appropriate to first establish that (i) data from different sources are comparable and compatible; (ii) economic growth in national accounts is actually mirrored by income growth in household surveys; and (iii) growth in income

in household surveys actually translates into growth in consumption (also taken from household surveys).

For a start, the household surveys for 2000 and 2005 had almost identical questionnaires and their overall intertemporal comparability is very good. However, some problems have inevitably emerged (these are explained in more detail in box 1.1). Major taxonomies used in the surveys, particularly the sectoral breakdown, are the same in the SNA and the HIES.

Moreover, the correspondence between household surveys and national accounts is relatively good. Although the income from the HIES is only 50–55 percent that of the SNA[7] (or about 75 percent in the case of private consumption), income shares per sector are very similar (see figure 1.4). The dynamics are also comparable. Nominal survey income grew by 40 percent over the five-year period compared with 50 percent in the SNA. The correspondence between private consumption growth in both sources (46 percent and 49 percent, respectively) is even better. At the level of three broad sectors, the correlation of income changes is weakened, as the SNA reports much higher growth in manufacturing (see figure 1.4). At the disaggregation level of nine sectors, this correlation breaks down somewhat.

Figure 1.4   How Well Do HIES and SNA Data Match?

(a) income by sector (2005), SNA vs. HIES

(b) income growth by sector: SNA vs. HI
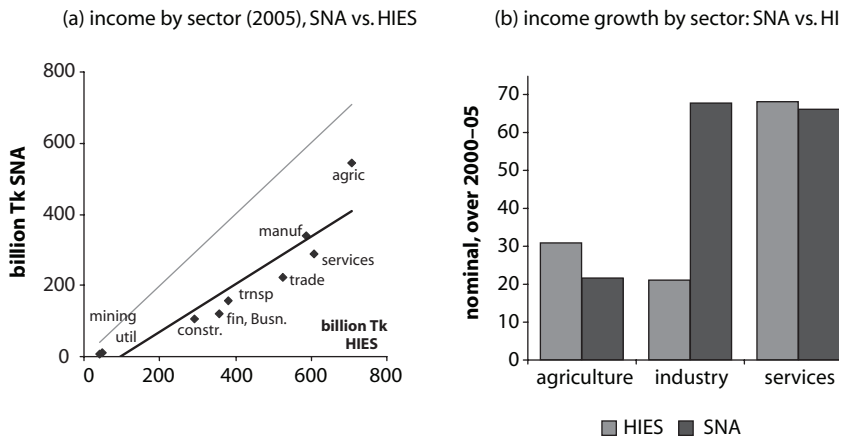
Sources: Based on HIES 2000, 2005; BBS.

Box 1.1

The Comparability and Consistency of HIES 2000 and 2005 Data

The questionnaires for the 2000 and 2005 HIES are almost identical; however, on closer inspection several issues emerge. These issues reflect fundamental difficulties that arise when one applies categories meant for analyzing the labor markets in developed countries in relation to labor markets in developing countries.

1. Who is employed? The HIES has two sections suitable for labor market analysis: a section in which people report their economic activities, and a section in which income is recorded. These two need not match. Therefore, is a person who does not report work but reports a small income from, for example, self-employment, employed? If so, what if field enumerators become more skilled in inquiring and recording income from year to year?

For example, in 2005 the income section seems to have improved in recording income from noncrop agricultural activities (particularly from self-consumed noncrop production) as reflected by an implausibly high increase in the number of items recorded per household (from 1.5 to 1.95). Do households really have more noncrop production? It is possible. However, the number of items per household was stable for other incomes. Also, the median value for some noncrop items fell. Thus it would appear that the survey in 2005 is better at recording fish caught from a river or milk taken from a family cow. Can we call that self-employment? The possible consequences of doing so include the following statistical artifacts: more people working in agriculture, higher employment rates, lower average earnings, and distorted sectoral dynamics.

To make things more confusing, in the section on activities in 2005, people report a much lower number of activities per household, particularly for agricultural self-employment (0.35 per household in 2005 versus 0.54 in 2000). The possible consequences for this analysis of accepting self-reported economic activity as a definition of employment include the following: fewer people working in agriculture, lower employment rates, more hours worked per person and higher average earnings, distorted sectoral dynamics, and a rather unfamiliar income category of "nonlabor agriculture income."

To resolve the issue, the labor market profile is based on the income section, so that a person is classified as employed if any wage or any self-employed

Box 1.1

(continued)

income is recorded. The 2005 profile is presented using the full 2005 data set, whereas the dynamics between 2000 and 2005 are derived from the 2000 and 2005 data sets brought closer to comparability by removing the noncrop self-consumed production of items for which self-consumption constituted over 90 percent of total income.

2. In what sector do people work? First, sector of employment is not always a straightforward concept in Bangladesh. In what sector should people be classified if they spend most of their time cultivating a small family plot but derive most of their income from ad hoc jobs at a neighbor's family business? In what sector should the survey classify a daily wage worker who comes to the marketplace to be hired for a different job every day? In this analysis people and households are attached to the sector from which they report the highest total income.

Second, when asked for the sector of activity, many people answer that they "have a business." A special sector (number 74: "Other business") from the International Standard Industrial Classification (ISIC) classification has been creatively adopted by the Bangladesh HIES for such cases, and it accounts for 15 percent of all activities and 60 percent of business activities. In order to match the HIES with the SNA, this ad hoc sector 74 must be distributed among proper ISIC sectors. Every reasonable effort was made to infer the proper sector from the description of the activity. Where it was impossible, sector 74 has been spread according to a joint sector-occupation distribution (derived from the sample). This was possible because information on occupation is present for all workers. Sensitivity tests indicate that the confidence intervals around average results of this allocation are small. Nevertheless, a question about employment by sector in Bangladesh does not have a precise answer.

Prices may play a role as well. Although the consumer price index (CPI) is typically used in this type of analysis, the reporting of actual unit prices in surveys allows the direct computation of deflators. These survey deflators may differ from deflators applied to macroeconomic aggregates. In this analysis, the nominal average change in regional poverty lines has been used as a deflator. In turn, poverty lines have been adjusted using

the average of CPI inflation and survey-derived indexes based on reported unit prices. Over 2000–05, these figures come very close (CPI inflation of 23 percent versus 26 percent used in this analysis). However, this has not always been the case. Throughout the 1990s CPI inflation was consistently higher (growing by 70 percent) than survey indexes (which grew by 25 percent). Indeed, prices literally worked to the advantage of the poor, mainly because over the 1990s rice became significantly cheaper in real terms.

Finally, growth in income in the HIES should translate into growth in consumption (also in the HIES). This does not have to happen automatically, owing, for example, to complex saving behavior, unobserved government intervention, and, not least, measurement error. Fortunately, income and consumption in the HIES are well behaved. Total consumption is 80–85 percent of income, and the correlation between logs of these variables is 0.8.

On balance, the Bangladesh data provide a relatively good basis for the growth, employment, income, and poverty analysis.

Expansion of Key Findings

Urbanization and the associated expansion of the services sector have recently taken over as key factors shaping the development process in Bangladesh. This brings new challenges for the poverty reduction effort.

- Despite the robust overall population growth, the rural population is nearly stagnating while the urban population is growing at a rate triple that of the national average. At the same time, the shift away from agriculture is ongoing, with daily labor in agriculture migrating to urban areas to take up nonagricultural work (usually as daily workers or self-employed).
- The services sector is now the fastest growing sector, which marks a change from the 1990s, when the manufacturing sector (mainly ready-made garments) was responsible for pushing up incomes and expanding employment (it still does, but to a lesser extent).
- Among the new challenges posed by this trend are the following: The absolute number of the urban poor has increased despite the overall countrywide reduction in the extent of poverty. Because the migration of the landless poor to urban areas is likely to continue, the time might

be ripe to consider special programs for the urban poor (until now, most antipoverty programs were addressed to rural areas).

The relatively flexible, and broadening, labor market facilitates the economic transition.

- Firms do not report particular problems with the hiring and firing of workers. The labor market dimension of the business environment in Bangladesh compares favorably with that of its neighbors. The minimum wage does not constrain employment growth.
- More transactions are market based. There are more salaried jobs, particularly in the private sector; more wages and land rents are paid in money rather than in kind; and the use of formal financing for household enterprises is gradually improving.
- In regards to segmentation, the returns to labor are surprisingly similar across job categories, except for daily labor, which is clearly the least desirable option. Self-employment does not seem to be particularly inferior compared with salaried employment in the private sector. Nevertheless, some long-standing segmentation is visible between public and private employment and between rural and urban areas. In addition, women are at a significant disadvantage in the labor market.

Although job creation has been important, recent increases in income per capita and the reduction in poverty have been linked predominantly to the rising productivity of employment, rising wages, and rising labor income. Most of the poverty reduction has taken place within the economic sectors, rather than being associated with movement of the poor out of the sector where they were.

- The results from decompositions suggest that productivity improvement and wage growth were key factors in income increases and subsequent poverty reduction. The lack of contribution of employment rates reflects in part the fact that unemployment is not an option for many in Bangladesh, so the scope for further increases in the employment rate (at least for men) is limited.
- Looking beyond the aggregate and into the sectors, evidence shows that within agriculture, the growth was related to rising productivity and an outflow of people to other sectors. In regards to manufacturing,

productivity was a key factor in the growth of income. The potential of manufacturing to further boost employment (as was the case in the past) should not be overestimated, not least because Bangladesh's garment exports will face increasing competition owing to the expiration of favorable MFA quotas. Regarding services, the expanding employment in this sector has greatly contributed to increases in GDP per capita. Thus it appears that the services sector, particularly in urban areas and in the private sector, has the potential to provide employment and income opportunities for many poor people in the future.

- It should be noted that most of the poverty reduction has taken place within economic sectors rather than through intersectoral flows. The same principle applies to rural versus urban areas. Therefore, taking into account that there are still five times as many of the poor in the countryside as in the cities, and given that the majority of the new entrants to the labor market would need to find their jobs in rural areas, the thrust of poverty reduction efforts may need to remain in areas where the poor are to be found. At the same time they need to concentrate on promoting productivity growth where productivity and wages are low, such as agriculture, while simultaneously trying to facilitate job creation in and inflows to sectors where productivity is high, for example, services in urban areas and manufacturing. In rural areas, nonfarm employment and diversification into higher-value-added crops have performed well for the past several years in this regard, and they hold considerable potential for the future.

The main determinant of labor market and poverty outcomes is endowment in productive assets—both physical capital and human capital. Additional investment in these assets is necessary, as is an environment conducive to higher returns to these assets.

- For the wage workers, education is a key determinant of whether a person finds a decent job. For the self-employed, the importance lies in productive assets (although education is also important). Land ownership is closely linked to poverty in rural areas, and landless workers usually end up as poor daily workers.
- Despite very large increases in microcredit over the past several years, a lack of capital remains the problem for household enterprises. Ninety percent of entrepreneurs finance their businesses from their own savings

or from families' or friends' savings, while half of them report credit and capital as the main problems.

- In addition, an environment conducive to the higher returns to human and other assets is crucial. Considerable evidence supports this: enterprises benefit significantly from better access to infrastructure; the deficiencies in the rule of law are at the top of the list of growth constraints for firms. On a positive note, a stable macroeconomic environment and trade openness are believed to have decisively contributed to the current growth acceleration.

Women are playing an increasingly important role in the Bangladesh labor market; however, their contribution remains small because of traditionally very low levels of participation.

- Women's participation rates, working hours, levels of education, and income levels have all increased at a much faster pace than those for men. Moreover, an increasing share of women's income derives from salaried employment as well as from household enterprises, often with more formal sources of financing.
- Although women's income is not negligible, their labor market participation is too small to make a significant dent in poverty. Furthermore, growth in their activity has been concentrated in the middle range and at the higher end of the income distribution.
- The current urban shift is important, as it provides an opportunity for women to take part in productive employment on better terms.

Notes

1. Despite all the progress, the level of trade protection in Bangladesh is the highest in the region and among the highest in the world (World Bank 2005, 2006). The trade-to-GDP ratio is only about 30 percent, the use of nontariff measures is increasing very rapidly, the level of foreign direct investment (FDI) is unusually low, and infrastructure bottlenecks (including a highly inefficient port) isolate the country from the rest of the world.

2. In fact, despite expiration of MFA quotas, Bangladesh's garment sector continued its growth; the industry is bullish and is expanding capacity. One explanation is quotas imposed on Chinese garments soon after the MFA had expired, which meant buyers needed to keep buying from Bangladesh.

3. In a country so exposed to natural hazards, the improved capacity to respond to natural disasters that Bangladesh has developed, together with a spread of more resilient dry-season irrigated crop production, have certainly contributed to this low growth volatility (Sen, Mujeri, and Shahabuddin 2004).

4. This is the case for the 1980s and the 1990s, according to the national accounts data. The World Bank (2007b), using data from household surveys, finds some disparities across regions in the income growth in the 2000s.

5. This rate of export contribution is similar to rates in other economies throughout South Asia, but it is significantly lower than in other growing low- and middle-income countries.

6. According to the HIES, "a waged worker is an individual hired by a firm (or other individual) and paid for a specified amount of work (expressed usually in time measure) and salaried worker is a waged worker usually on a longer term contract and usually paid by the month."

7. It is common to find that income and consumption in surveys are typically lower than that from the SNA. The main reason seems to be coverage. The SNA covers more channels and estimates aggregates that it cannot directly record, whereas surveys often suffer from underreporting. Second, it is not uncommon to find diverging dynamics between surveys and the SNA, typically with mean income/consumption from surveys showing a slower growth than the same aggregate from national accounts. Again, differences in coverage and measurement errors are believed to be the main culprits.

Labor Market Overview

This chapter presents the main features of the Bangladesh labor market, including the demographic developments, the institutional underpinnings of the labor market, the investment climate for firms, and the sectoral composition of employment, as well as the general trends of key indicators.

Demographic Developments

Demographic transition is one of the key forces in shaping the economic and labor market landscape. In Bangladesh, population has been growing rapidly for decades, at about 2.5 percent per year. Despite falling total fertility rates, factors such as increasing life expectancy and lower child mortality have contributed to a robust population growth. During the 1990s demographic expansion moderated to slightly below 2 percent per year. Between 2000 and 2005, the total population increased by about 13 million.[1] One consequence of these demographics is that the working population has been increasing even more rapidly than the total population (growing at rates of 2.5–2.8 percent into the 2000s).

The implication for the labor market is that every year it must absorb a new wave of young entrants. More recently the increasing participation of women has put additional pressure on the market.

In such an environment, out-migration has traditionally been an important employment option, helping to ease the labor market pressures resulting from fast demographic expansion. Government statistics estimate that 3.7 million Bangladeshis have emigrated during the past 30 years, and about 3 million are currently living abroad, equivalent to more than 6 percent of the in-country labor force (Rahman 2005). These statistics report only documented migration, and most probably significantly underestimate the true numbers.

Figure 2.1 presents population pyramids derived from the 2000 and 2005 Household Income and Expenditure Surveys (HIES). The pyramids are typical of a country with a young population. The outward expansion of the pyramid between 2000 and 2005 reflects the growth in the total population. The upward movement of the "body mass" reflects the even more rapid growth of the working-age population. The apparent "dent" among prime-aged men probably reflects missing household members who have migrated or have gone out for work and thus remained unreported in the survey.

The Institutional Setup of the Labor Market

The way in which the labor market is organized is obviously relevant to whether new employment opportunities arise and whether people are able to take advantage of them. Wage-setting processes, hiring and firing practices, minimum wage restrictions, and barriers to mobility, among other factors, are all important to the way productivity gains materialize and translate into higher incomes and poverty reduction. Also, for firms to create employment and increase productivity, a conducive environment—a good "investment climate"—is necessary. This section reviews the institutional setup for the labor market in Bangladesh and briefly describes the issues related to doing business in Bangladesh.

Labor relations
Because shares of employment in agriculture and self-employment are high in Bangladesh, the majority of workers are unaffected by labor regulations. Nevertheless, labor relations, which are often turbulent, play an important role.

Figure 2.1   Demographic Situation in Bangladesh

(a) 2000

(b) 2005

(c) population and its growth
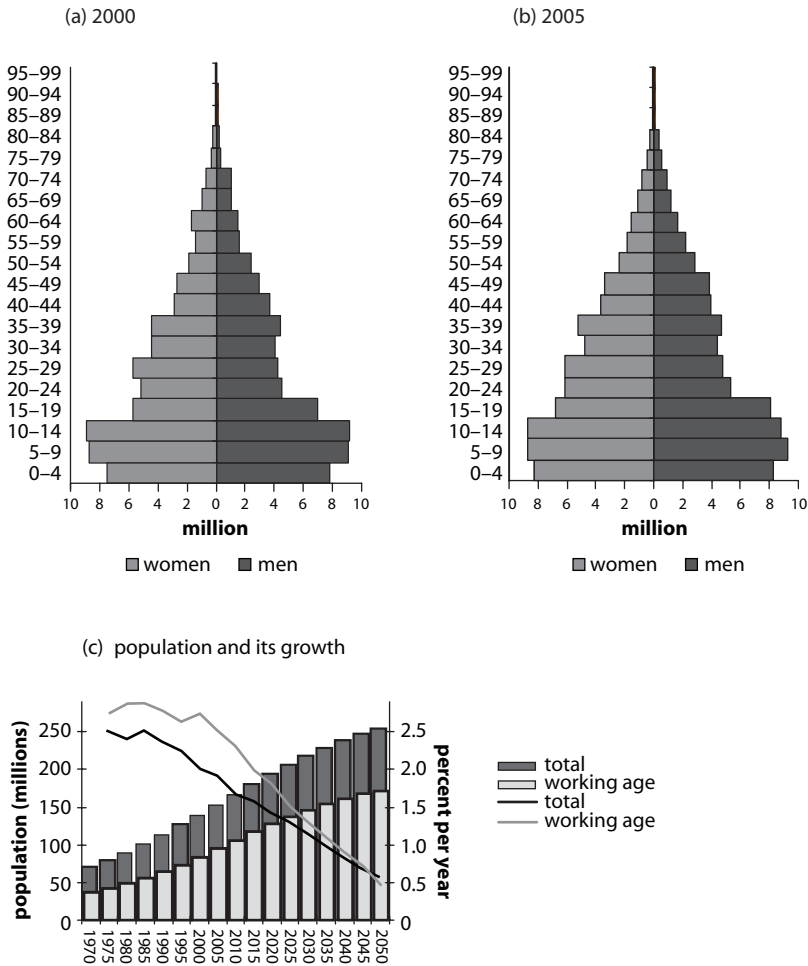
Sources: Based on Household Income and Expenditure Survey (HIES) 2000, 2005; United Nations population projections in "World Population Prospects,"

The level of unionization, at 3 percent of all workers, is believed to be low (International Labour Organization [ILO] 2003). A key characteristic of trade unions in Bangladesh is their traditional, strong politicization. The largest union federations are in fact extensions of the main parties,

very frequently brought into play to intimidate political opponents rather than to negotiate with employers over pay and work conditions (ILO 2003). For example, in 2004 a series of general strikes was called in an attempt to bring down the government.

Despite the low unionization level, public sector wage setting affects many workers, given the relatively high presence of state ownership in Bangladesh. The public sector is covered by a set of pay scales that are irregularly adjusted (every five to eight years) by the government on a nonbinding recommendation from the National Pay Commission and the National Wages and Productivity Commission, which consist of representatives of workers, private employers, and the government (ILO 2003). The apparent lack of regard in the current centralized system for the link between wages and productivity is said to contribute to poor performance on the part of public enterprises (World Bank 1996).

As regards the private sector, wages are normally market based and are subject to collective or individual bargaining. However, in sectors where the presence of public enterprises is high (for example, jute and cotton textiles), the private sector wage seems to be responsive to changes in the public sector wage (ILO 2003). Organized union activity is very low in the private sector, particularly in the export processing zones (EPZs). This situation arises partly from government restrictions (World Bank 2006).

There is no national minimum wage in Bangladesh. Instead, the levels of minimum wages are recommended by the National Minimum Wages Board (different rates for different sectors and different skill levels). Currently, a minimum wage exists in more than 35 sectors. The choice of sectors and rates seems to be somewhat arbitrary; for example, a worker in the EPZs should earn no less than approximately US$30 per month, while a worker in the garment industry outside of the EPZs should earn approximately US$10 per month. There is a separate minimum wage for "traditional" agricultural laborers, equal to 3.27 kilograms of rice per day (or a monetary equivalent; World Bank 1996; Asian Development Bank [ADB] 2005).

In any case, labor regulations are ineffectively enforced (World Bank 2006). Not only is the administrative capacity weak, but it also seems to be a policy choice not to enforce the rules and not to intervene excessively in the labor market. For example, in the majority of designated sectors, minimum wages are far below the market rate because their nominal level has not been updated for years (World Bank 1996).

Investment climate

Table 2.1 provides further comparative evidence on the employment aspect of doing business in Bangladesh, as well as information on select-ed dimensions (infrastructure and governance) of the investment climate.

Firing restrictions are not prohibitive, particularly when compared with the region. A worker may be made redundant with a one-month written notice and must be paid the equivalent of one month's salary per year of service (World Bank 1996). Most businesses retain considerable flexibility in hiring and firing, and the nonwage labor costs are minimal. In fact, the average firm in the enterprise survey of the Investment Climate Assessment reports that its staffing level is optimal (World Bank 2003b).

Thus, there are no signs that labor market regulations impede the growth of firms. If anything, a gradual lifting of restrictions on union activities in the formal private sector may support workers' ability to engage in collective bargaining and protect their rights (World Bank 2006).

As regards other dimensions of the investment climate, two obstacles to the growth of private enterprises in Bangladesh consistently occupy the top of the list of managers' complaints, namely, infrastructure bottlenecks and governance. Regarding infrastructure, the demand for electricity has far outstripped the supply, and a lack of dependable sources forces firms to incur the costs of owning generators or having power outages. The inef-ficient main port is increasing the costs of foreign trade significantly, thus limiting the growth potential. Regarding governance, the country's poor law and order, corruption, bribery, and extortion are pervasive (World Bank 2003a, 2003b). Indeed, Bangladesh is known for consistently scor-ing at the bottom of governance tables—to the point that reconciling the country's good growth performance with its weak governance record has become a conundrum.[2]

Labor Market Indicators

Bangladesh is a rapidly urbanizing society. The growth of the urban pop-ulation—from 20 percent in 2000 to 25 percent in 2005, or over 6 per-cent per year—was triple the growth of the total population. This process has been driven by the rural-to-urban migration of prime-age population, as reflected by a significantly higher share of people ages 15–64 in urban

Table 2.1 Investment Climate: Doing Business in Bangladesh

	Bangladesh	India	Sri Lanka	Indonesia	Vietnam	South Asia	East Asia	World
Doing Business: Difficulty of Firing Index (*)	40	70	60	50	70	38	20	..
Termination of workers due to redundancy legally authorized?	Yes	Yes	Yes	Yes	Yes	..	..	..
Approval of a third party needed to terminate one worker?	No	Yes	Yes	Yes	Yes	..	..	..
Approval of a third party needed to terminate a group of workers?	No	Yes	Yes	Yes	Yes			..
Firing costs (weeks of wages)	51	56	178	108	87	..	..	..
Doing Business: Rigidity of Employment Index	30	41	27	44	37	35	23	..
Can term contracts be used only for term tasks?	No	Yes	No	Yes	No	..	..	..
Nonwage labor cost (% of salary)	0	17	15	10	17	..	..	..
Investment Climate Assessment (rank)	88	134	89	135	104	..	..	..
Number of electrical outages (days)	249	67	..	4	11	109	7	24
Delay in obtaining a mainline telephone connection (days)	126	9	48	19	9	54	9	27
Management time spent in dealing with government regulation (%)	4	7	4	4	6	7	7	7
Firms expected to give gifts in meetings with tax inspectors (%)	86	52	3	11	48	47	34	32
Confidence level in the judiciary system (%)	17	75	69	59	77	54	66	58

Sources: World Bank 2003b; 2007d; 2007e. Investment Climate Assessments enterprise survey data for the following countries and years: Bangladesh (2002), India (2006), Sri Lanka (2004), Indonesia (2003), Vietnam (2005).

Note: (*) ranges from 0 to 100, higher values mean more rigid environmnent.

areas. Despite a relative decline, the rural population actually grew slightly in absolute terms. Table 2.2 contains key information on the labor market in Bangladesh.

Between 2000 and 2005, growth in Bangladesh was accompanied by employment generation: about 5.6 million new workplaces were created during this time.[3] However, this was just enough to maintain the overall employment rate at the unchanged level. Moreover, at 47 percent, this employment rate is very low by world standards. These low rates are due entirely to the extremely low labor market participation of women. Indeed, many households, particularly in urban areas, have only one income-generating member, while women are predominantly confined to household work.

Open unemployment, at 1 percent, does not provide a meaningful measure of labor market slack. First, the typical ILO-recommended definition of unemployment is highly sensitive to how labor market participation is measured, and thus is unreliable.[4] Second, it is important to note that in the absence of a comprehensive social security system, only the better-off households can afford not to have a working member. Those who would normally opt for unemployment in more developed countries need to survive by working in low-intensity, low-paid daily-wage jobs or self-employment.

Underemployment is more common, however. About 9 percent of the employed work fewer than 20 hours a week on average throughout the year. Underemployment is more prevalent among women and in rural areas, where it is related to the existence of a slack agriculture period. But on the whole, the people of Bangladesh are hard working, as is seen particularly in the data for men and urbanites, who spend on average more than 47 hours a week at work.[5] This work intensity fell by two hours between 2000 and 2005.

Mean earnings per worker (as derived from the survey) have been growing relatively slowly over the period 2000–05, increasing by 0.9 percent a year. However, it is important to bear in mind that income per capita (not per worker) has been growing twice as rapidly (at 1.9 percent per year in real terms) owing to a rapid increase in the working-age population (from 56 percent to 59 percent of the total population) and, consequently, an increase in the share of people working.

A major weakness is the very low literacy rate. Only 55 percent of those ages 15–64 can read and write, and the average number of years spent in formal education is only 4.4.

Table 2.2 Labor Market Overview, 2000–05

	2000	2005	Annualized real growth (%)[a]	2005 Men	Women	Urban	Rural
Population (million)	128.9	141.8	1.9				
% urban	20	25	6.3				
Working-age population[b] (million)	72.6	83.6	2.9	41.7	41.9	22.4	61.3
% of total	56	59	—	58	59	64	57
Employment[c] (million)	37.5	43.1	2.8	33.1	5.5	11.2	32.0
Employment rate[b] (%)	47	47	—	82	12	47	47
Unemployment rate[d] (%)	6.9	1.5	—	1	3	2	1
Underemployment rate[e] (%)	9	9	—	8	13	5	10
Child employment rate[f] (%)	5	4	—	6	1	4	4
Mean earnings per worker[g] Tk/month	2,553	3,364	0.9	3,602	1,750	5,104	2,756
Median earnings per worker[g] Tk/month	1,739	2,223	0.3	2,398	1,000	3,120	2,000
Median hourly rate[h] Tk	8.8	11.3	0	11.7	6.9	13.6	10.6
Hours worked per week[i]	48.4	47.2	—	47.6	43.6	54.5	44.6
Poverty rate[j] (%)	48.9	40.0	–2.1	39	41	28	44
Literacy[k,l] (%)	47	55	—	61	49	71	49
Average years of education[l]	3.7	4.4	—	5.1	3.8	6.4	3.7
Average years of education, employed	3.5	4.2	—	4.3	3.4	6.3	3.5

Sources: Based on HIES 2000, 2005; World Development Indicators (WDI).

Notes: — = not applicable.

a. Annualized real growth calculated from absolute levels. b. In 15–64 age category. c. Involved in any paid activities during the year. d. ILO definition, based on seven-day reporting period. e. Employed 20 hours per week or less (yearly equivalent per year), percent of employed. f. In 6–14 age category. g. From all activities. h. In main activity, that is, in activity with highest earnings. i. In all activities, calculated from yearly equivalent per year. j. Based on consumption and on upper poverty line. k. Able to read and write. l. For working age population (illiterate individuals have been assigned zero years of schooling).

Finally, a look at table 2.2 also makes it clear that there are two major divisions in the country's socioeconomic landscape, namely, urban versus rural and male versus female. This is evident from almost any indicator. For example, women are at a clear disadvantage (judging by outcomes and without speculating on causes): they have fewer years of education and few of them work for money, while those who do work for money earn as little as half of the average wage. Similarly, in rural areas wages are lower, the poverty rate is higher, and literacy is less prevalent. These differences are explored later in the report.

Table 2.3 further disaggregates the Bangladesh labor market to describe the education and skills composition as well as the characteristics of various types of jobs. It is apparent that labor market behavior and outcomes are strongly linked to the level of education and skills. All outcomes (that is, total earnings, wages, and work intensity) are correlated with education and skills variables. It is thus reassuring to see that the educational profile of the labor force is improving. For example, the pool of tertiary graduates grew by 8 percent every year between 2000 and 2005 (although from a very low base).

In Bangladesh people are engaged in four distinct types of jobs, namely, (i) daily wage jobs, (ii) salaried jobs, (iii) nonagricultural self-employment, and (iv) farming activities (also termed "self-employment in agriculture").

The daily wage sector, which accounts for about a third of all workers, is a residual sector, with the lowest pay. It consists of daily wage employment in agriculture recruited from predominantly landless individuals who engage in work such as harvest help or fishing. The sector also includes daily wage work outside of agriculture, in employment such as construction work, carpentry, rickshaw pulling, unloading of trucks, and similar work that can be hired by the hour or the day. The daily wage sector is as close as labor comes to being a commodity: the variation in wages is minimal, the rewards to education are almost nonexistent, and very few workers have any education. The work is extremely casual, as is reflected in the low number of hours worked per week. Consequently, the income for these workers is very low and the poverty rates are the highest.

Salaried jobs (about one-fifth of workers) consist of two distinct groups: those working for the government (or community organizations) and the remainder. The former (about 8 percent of all workers) are characterized by high education achievements and very high relative earnings

Table 2.3 Structure of the Labor Market, 2000–05

| | 2000 | 2005 | Annualized real growth (%) | 2005 | | | | |
				Employment rate	Median earnings[a] (Tk)	Median hourly rate[b] (Tk)	Hours worked[c]	Poverty Rate[d] (%)
		% of total population		% of working-age population	Among the employed			
Education status								
No education	63.5	57.1	-0.2	48	1,800	9.5	44.0	51
Incomplete primary	6.7	7.4	3.9	54	1,868	10.0	47.8	38
Complete primary	8.1	8.9	3.8	49	2,250	11.1	48.6	35
Incomplete secondary	9.2	11.1	5.6	42	2,500	11.9	49.0	26
Complete lower secondary	8.2	10.6	7.2	39	3,088	14.6	50.3	15
Higher secondary	2.3	2.4	2.7	49	4,783	20.6	52.7	7
Tertiary	1.9	2.6	8.0	69	6,417	27.1	54.9	3
Employment	Share of total employment (%)		2.8	Years of. education	2,223	11.3	47.2	38
Waged employment[e]	53	53	3.0	4.3	2,200	10.0	48.5	46
Daily wage	33	32	2.0	1.8	1,827	9.2	43.4	60
Agriculture	19	16	-1.2	1.3	1,600	8.5	39.6	66
Nonagriculture	14	16	5.9	2.3	2,200	10.0	47.2	55
Salary	20	22	4.6	7.8	3,378	13.9	55.9	25
Public sector[f]	4	4	4.2	10.7	5,654	24.2	52.8	9
Community sector[g]	3	4	6.8	10.5	4,138	17.5	52.3	18
Private sector	13	14	4.1	6.1	2,735	10.7	57.8	32

	2000	2005	Annualized real growth (%)	Employment rate	2005 Median earnings[a] (Tk)	Median hourly rate[b] (Tk)	Hours worked[c]	Poverty Rate[d] (%)
		% of total population		% of working-age population	Among the employed			
Self-employment	47	47	2.6	4.1	2,257	13.7	45.4	29
Nonagriculture	21	20	1.6	5.0	3,152	13.9	54.6	28
Individual (own-account)	12	11	0.7	4.2	3,104	13.7	53.0	35
Family[h]	3	4	6.1	4.9	2,167	10.8	52.2	27
Employers[i]	5	5	0.5	7.1	5,417	20.6	60.5	11
Agriculture	27	27	3.4	3.5	1,588	13.6	37.9	29
Subsistence[j]	9	8	1.8	3.2	954	8.4	34.8	30
Market[k]	18	19	4.1	3.6	2,060	16.0	39.2	29
Skills (working population)[l]								
White-collar, high–skill	7	9	8.2	9.1	3,646	16.3	51.2	24
White-collar, low-skill	26	29	5.1	5.3	3,000	12.5	54.1	32
Blue-collar, high-skill	7	5	-3.4	4.7	2,750	12.7	50.0	38
Blue-collar, low-skill	60	57	1.7	2.9	1,904	10.0	43.0	45

Sources: Based on HIES 2000, 2005; WDI.

a. Bangladesh taka (Tk)/month, from all activities. b. Tk/month, in main activity, that is, in the activity with the highest earnings. c. In all activities, calculated from yearly equivalent per year. d. Based on consumption and on "upper" poverty line. e. Job categories in main activity. f. Government organizations, state-owned enterprises, local governments. g. "Autonomous bodies," nongovernmental organizations. h. Household enterprises with two or more members from the households and with no outside employees. i. Household enterprises employing outside workers. j. Members of households that derive more than 90 percent of their income from agriculture and consume more than 50 percent of their own agricultural production. This is an arbitrary definition so the category should not be taken literally, but should serve as a proxy for subsistence agriculture. k. Defined as all self-employed in agriculture who are not subsistence farmers. l. ILO's International Standard Classification of Occupations (ISOC 1988), collapsed into the four skill groups.

and wages. Those in the latter group, namely private sector salaried employees, earn hourly wages that are not much higher than those of the daily workers. To make up for these wages, they work hard (over 57 hours per week, on average).

The self-employed outside of agriculture (20 percent of all employed) are mainly own-account individuals. Within this category, the employers stand out as a group with much higher earnings, long working hours, and low poverty rates. On the other hand, the standard deviation of self-employment income is two to three times higher than that of the wage workers, which means that entering self-employment is inherently more risky than being paid a wage.

It is important to note that the income of the self-employed compares favorably with the income from salaried jobs. Thus, the distinction between a good-quality job and a bad job in Bangladesh does not necessarily amount only to being paid a salary, as is often thought to be the case in this context. For that reason, the distinction between the formal sector and the informal sector in Bangladesh is not straightforward (except for the government employees, who are clearly formal). Many private sector wage and salaried jobs do not provide any of the benefits typically associated with formality" elsewhere. Indeed, some do not even provide a contract.

Finally, the self-employed in agriculture account for 27 percent of all workers. They are usually older (on average, 42–45 years old, compared with the median worker, who is 36) and a certain share (depending on the definition) are subsistence farmers. Land tenancy arrangements are widespread: about 45 percent of the crop-producing households rent some of the land that they cultivate, and about 20 percent rent all of it. Despite these low earnings, the self-employed in agriculture can make a decent living; the poverty rate among this group, at 30 percent, is below the national average.

The dynamic over 2000–05 is revealing. Although all of the broad categories preserved their shares, some reshuffling took place within them. Most important, there has been a broad shift away from daily wage work in agriculture, with the absolute number of workers in this category falling, to daily wage work outside of agriculture. This finding is consistent with the premise of landless daily workers moving from rural to urban areas. Second, salaried employment grew at almost 5 percent per year and increased its share from 20 percent to 22 percent. The share of

self-employment remained stable, with a slight decrease in individual self-employment outside of agriculture. Finally, there was a noteworthy increase in the number of people working in family businesses.

Table 2.4 shows several interesting results regarding the sectoral composition of employment and earnings in Bangladesh, and the dynamic of these components.

Agriculture is the most important sector, employing almost half of the population (counting those with their main employment in agriculture) and providing over 30 percent of income. Agriculture's importance has been falling over 2000–05 in relative terms (declining from 51 percent to 46 percent of total employment), although in absolute terms the number of people in agriculture has been growing by some 120,000, or 0.7 percent, per year. Correspondingly, the share of income from agriculture fell, while the total income derived from it stagnated.

The expansion of the manufacturing sector, which was driving growth during the 1990s, has leveled off in the first half of the 2000s, at least according to the HIES. Its share of employment (18 percent) remained constant while the share of income (about 20 percent) fell slightly.[6]

In turn, as urbanization is progressing at a high speed, the construction sector has been growing rapidly, with employment and real income expanding by 7.5 percent and 5.1 percent, respectively, per year over the period.

However, the most important contribution to both income and employment came from the services sector. Employment has been expanding by over 5 percent per year and income by over 7 percent annually. Trade and catering, as well as the public and community sectors, contributed the greatest boost.

In conclusion, the emerging picture is that of a development process gradually shifting the emphasis from a combination of nonfarm activities in rural areas and the manufacturing-led growth of income and employment, to rapid urbanization and the expansion of services. The shift away from agriculture continues, with landless daily labor in agriculture migrating to urban areas to take up nonagricultural work (usually as daily workers or as self-employed). Salaried employment is on the rise. The relatively flexible labor market is facilitating this economic transition. Inevitably, this trend will bring new challenges. For example, the absolute number of the urban poor has increased despite the overall countrywide reduction in the extent of poverty.

Table 2.4 Economic Sectors, 2000–05

	Employment shares (%)		Annualized real growth (%)	Sector size			Absolute nominal change	Annualized real growth[a] (%)	Poverty rate (%)
	2000	2005		2000	2005				
				In per capita terms		2005 Share (%)	Per capita	Total income	
Total employment	100	100	2.8	771	1,066	100	295	3.7	
Agriculture. forestry, fisheries[b]	51	46	0.7	292	341	32	48	0	42
Mining & quarrying	0	0	n.a.	1	4	0	3	n.a.	43
Manufacturing	18	18	2.8	175	218	20	43	2.1	36
Utilities	0	0	4.5	4	6	1	2	5.4	25
Construction	4	5	7.5	32	56	5	24	5.1	46
Trade, hotels & restaurants	8	8	4.3	74	137	13	62	8.1	27
Transport, storage, communication	8	9	5.1	66	85	8	19	2.5	50
Finance, real estate, business services	2	3	n.a.	23	54	5	31	n.a.	21
Community and personal services	10	11	5.2	104	165	16	62	8.2	22
Agriculture	51	46	0.7	292	341	32	48	0.4	42
Industry[c]	22	23	3.9	212	284	27	72	2.9	38
Services	27	31	5.4	267	441	41	174	7.4	31

Source: Based on HIES 2000, 2005.

Notes: n.a. = Too few observations for proper inference.
a. Of total income originating in a sector. b. See box 1.1 for qualifications about deriving employment by sector. c. Including construction. d. Expressed as total income (per month Taka) originating in the sector divided by total population.

Notes

1. Data on population differ somewhat depending on the source. This report uses figures from *World Development Indicators* (WDI; World Bank 2007c). All absolute numbers presented in this report, such as the number of new jobs created or the number of the poor, are derived from these WDI total population numbers, by applying shares calculated from household budget surveys such as the Household Income and Expenditure Survey (HIES).

2. The unbundling of governance in Bangladesh may help resolve this paradox in an innovative way. For example, the report by the World Bank (2006) shows that there are actually some areas of strength. However, there is little doubt that improvements in governance are essential to future sustained private sector investment (World Bank 2003a).

3. This number has been calculated by applying employment-to-population ratios computed from household surveys to total population numbers from WDI (see also endnote 1 in this chapter).

4. That sensitivity is evident in the unexpectedly big change in the unemployment rate between 2000 and 2005. In general, the definition of labor market participation, or even employment, is subject to serious challenges in low-income countries, including Bangladesh (see box 1.1).

5. Compared with the mean of 39 hours weekly for countries reported in ILO's labor statistics database. However, the majority of countries included in that database are middle and high income. Bangladesh's LFS (Labor Force Survey) reports somewhat lower hours worked.

6. It cannot be ruled out that the leveling-off of manufacturing employment is temporary. For example, recent work by the World Bank (2008) shows considerable expansion of nonfarm manufacturing enterprises in the periurban areas and medium-size towns.

Poverty and the Labor Market

This chapter explores the links between poverty and the labor market. It looks into sources of income and develops a labor market poverty profile. By decomposing income growth and poverty reduction into components, it tries to find which sectors were growing and whether poverty reduction took place as a result of the sectoral shifts of employment or through growth within the sectors.

Income Sources

Table 3.1 shows the sources of income in the Bangladesh economy. Nonlabor income constitutes about a quarter of the total, which is within a range of values typically found in other countries. The most important nonlabor item is private transfers, and among them foreign remittances, which account for 7 percent of total income.[1] Foreign remittances are growing continuously. Government transfers, at least those captured by the Household Income and Expenditure Survey (HIES), are not a significant source of income overall, although they may be important for the poor.

Table 3.1   Income Sources

	2000	2005	Annualized real growth (%)[a]
All income (Tk/month/person)	1,029	1,428	3.8
Share of total income (%)			
Nonlabor income	26	26	4.2
Property income	7	6	−0.1
Social and charity	1	1	1.9
Selected govt. programs[b]	0	0	n.a.
Private transfers	10	10	4.9
Foreign remittances	7	7	5.7
Other	8	9	7.0
Labor income	74	74	3.7
Share of work income (%)			
Waged employment	45	48	5.0
Daily wage	21	19	1.8
Agriculture	10	8	−1.8
Nonagriculture	10	11	4.8
Salary	24	29	7.5
Public sector	7	7	5.4
Community sector	5	7	10.0
Private sector	12	15	7.5
Self-employment	55	52	2.5
Nonagriculture	33	31	2.6
Individual	14	13	1.8
Family	2	3	8.0
Employers	16	15	2.4
Agriculture	23	21	2.4
Subsistence	5	3	−2.4
Market	18	18	3.5

Sources: Based on HIES 2000, 2005.

Notes: n.a. = too few observations.

a. For total (not per capita) economy-wide income originating in a given category. b. VGD, IFS, FFW (money), Test Relief, VGF, GR, Money for Education, RMP, Old Age and Freedom Fighters' Pension, others in 2005; VGD, VGF, GR, FFE, in 2000.

Bangladesh is an economy with a high reliance on self-employment. Over half of the total income is generated in household enterprises, mainly outside of agriculture. The sector is undergoing a gradual consolidation: income from individual self-employment has been growing more slowly than the average, with people taking up salaried employ-

ment instead. Family businesses (that is, "proper" enterprises with several household members) have been expanding as a source of income, although from a low base. For agricultural self-employment, the income share is gradually declining, while income from subsistence agriculture is falling in absolute terms.

Despite its importance, the area of self-employment and household enterprises remains insufficiently explored in Bangladesh (this is also the case in other low-income countries). One reason for this, but not the only one, is a general lack of tools and methodologies for dealing with the subject. Self-employment is discussed in more detail in chapter 4.

Growth in earnings has been led by increases in income from salaried employment (7 percent real growth per year), particularly in the private sector. In the daily wage category, income from agricultural daily labor fell in absolute terms, while nonagricultural income kept up.

Poverty Profile of the Labor Market

The development of a poverty profile of the labor market is a convenient starting point for analyzing the links between employment and poverty reduction. Such a profile links labor market characteristics to poverty measures. Table 3.2 provides such a profile for Bangladesh. An interesting feature is that almost all of the presented indicators increase or decline monotonically along quintiles of consumption, meaning that most of them have a strong association with poverty.

Poverty is not associated with unemployment in Bangladesh. On the contrary, only the better-off households can afford not to have a working member. In fact, poor people tend to have higher employment rates, although they often work in low-intensity, low-paid activities, as is reflected by lower working hours, a higher underemployment rate, and lower earnings.

Poverty outcomes are highly correlated with education. Educational achievements are lowest in the bottom quintile (average of 1.8 years of education) and highest in the top quintile (8.1 years on average).

Exactly half of the poor workers are concentrated in the daily wage sector. As a consequence, the poverty rate in this sector (60 percent) stands out as very high. Outside the daily wage sector, poverty incidence (25–30 percent) is similar between job categories, although the better off tend to work in salaried employment or in self-employment outside of

Table 3.2 Labor Market and Poverty Profile, 2005

	Q1[a]	Q2	Q3	Q4	Q5	Poor	Nonpoor	Total	Poverty rate
Employment status									
Employment rate (%)	51	49	48	46	43	50	45	47	-
Unemployment rate (%)	1.2	0.9	1.4	2.0	2.0	1.0	1.8	1.5	-
Underemployment rate (%)	8.3	9.6	9.9	8.8	6.2	8.8	8.4	8.5	-
Average years of education[b]	1.8	2.5	3.2	5.1	8.1	2.1	5.4	4.2	-
Urban (%)	11	16	20	31	49	19	30	25	-
Job types[c]		*Shares within quintiles (%)*				*Shares within poor/nonpoor (%)*			
Daily wage	59	43	32	20	7	50	20	32	60
Salaried	10	14	18	27	38	14	26	22	25
Nonagriculture self-employment	12	15	18	22	29	14	23	20	28
Agriculture self-employment	19	27	32	32	26	21	31	27	29
Sectors									
Agriculture	55	53	50	43	30	51	43	46	42
Industry	20	23	24	25	23	23	23	23	38
Services	25	24	26	32	46	25	34	31	31
Earnings and hours									
Median earnings (Tk/month)	1,650	1,913	2,051	2,600	4,167	1,800	2,658	2,223	-
Median hourly rate (Tk)	8.1	9.6	11.3	13.7	19.8	9.0	13.8	11.3	-
Hours worked (week)	45.6	45.2	45.5	48.0	51.7	45.7	48.1	47.2	-
Extent of low earnings[d]									
Low earners	82	73	66	56	38	77	54	62	-
Nonlabor income	14	16	21	25	32	15	28	25	-
Social income[e,f]	2.1	1.5	1.4	0.7	0.7	2	0.8	1	-
Foreign remittances[e]	1.3	2.3	5.8	9.1	9.0	2	8	7	-

Sources: Based on HIES 2000, 2005.

a. Quintiles defined using consumption per capita. b. For the employed. c. See table 2.3 for definitions of aggregates and categories. d. See text below for a definition of low earners. e. Share of total income. f. Private charity and government social programs.

agriculture. As regards broad economic sectors, the distribution is relatively uniform for the first three quintiles, with 50 percent, 25 percent, and 25 percent, respectively, working in agriculture, industry, and services. Among the top two quintiles, the share of agriculture is much lower and the share of services is higher.

Table 3.2 indicates a strong relationship between the lack of labor income and poverty. Moreover, the poor derive a much greater share of their income from labor, and this share has increased slightly over the period (compared with a small decline for the rest of the distribution). For a better understanding of whether low labor earnings imply economic hardship, a category of low earners can be defined as those among the employed who earn less than the per capita poverty line times the average dependency ratio.[2] Clearly, as much as 80 percent of the poor are low earners. However, the prevalence of low earnings among the nonpoor (about 50 percent) is relatively high as well, which suggests that poverty is not fully determined by labor earnings. The extent of low earnings did not change between 2000 and 2005.

Decomposition of Poverty Reduction

This section takes a closer look at the channels through which labor markets have affected welfare between 2000 and 2005. It describes the relative importance of productivity growth versus employment growth and identifies sectors that have been associated with poverty reduction. A convenient method of approaching these questions is through a decomposition.

Wage growth and poverty reduction
The first step is to analyze the sources that contributed to the observed changes in total labor income. This can be done through the following decomposition. Income per capita can be decomposed as

$$\frac{I}{N} = \frac{I}{H}\frac{H}{E}\frac{E}{A}\frac{A}{N} \qquad \text{(Equation 3.1)}$$

where I is total income, H is hours worked, E is employment, A is working-age population, and N is total population. Taking logarithms next obtains $i = \omega + h + e + a$, and then $\Delta i = \Delta\omega + \Delta h + \Delta e + \Delta a$, where i, ω, h, e, and a stand for logarithms of income, average hourly rate (or wages), hours worked, employment rate, and the inverse of the dependency

Figure 3.1   Income Growth Decomposition, 2000–05

Contributions to changes in income per person

percent
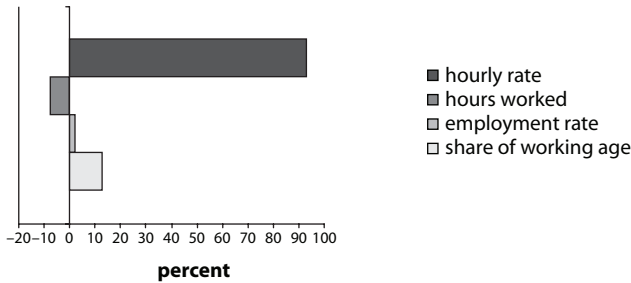
Sources: Based on HIES 2000, 2005.

ratio, respectively. In this decomposition, wage rate would, in principle, correspond to productivity, and employment rate, hours worked, and the share of working-age population combined would correspond to the work intensity within the economy. The result of this decomposition, presented in figure 2.1, reveals that the increase in wages (more precisely, in the wage rate) accounts for the majority of growth in per capita labor earnings.

Once the importance of wage growth to rising total income is established, further evidence follows on whether this growth in total income has been associated with poverty reduction. Table 3.3 compares growth in earnings with poverty reduction outcomes for the main categories, sectors, and markets in Bangladesh.

Mean labor income per worker has been growing by about 1 percent per year. The distribution of this growth has been somewhat uneven. For example, between provinces it ranged from a decline of 2 percent annually in Barisal to an increase of 5 percent per year in Sylhet. In fact, within many categories, income per worker as recorded by the HIES did not grow. For example, among broad economic sectors, earnings increased noticeably only for workers in services. As regards job types, salaried workers, in particular those in the private sector, enjoyed a robust income growth of 2.4 percent per year. Earnings for the self-employed outside of agriculture grew at an average pace. Incomes grew more rapidly for skilled work and white collar occupations.

Table 3.3 Labor Income Growth and Poverty Reduction, 2000–05

	Annualized real earnings growth[a]	Poverty rate change 5 Year	Job type[b]	Annualized real earnings growth[a]	Poverty rate change 5 year	Sectors[c]	Annualized real earnings growth[a]	Poverty rate change 5 year
	Per worker (%)	Percentage points		Per worker (%)	Percentage points		Per worker (%)	Percentage points
Total labor income	0.9	−9	Waged employment	2.0	−8	Agriculture, forestry, & fisheries	−0.2	−10
Region[d]			Daily wage	[0.3]	−8	Mining & quarrying	[−3.9]	2
Barisal	−1.8	−1	Agriculture	−0.3	−7	Manufacturing	−0.6	−7
Chittagong	3.0	−12	Nonagriculture	−0.4	−7	Utilities	0.3	−9
Dhaka	[0.0]	−15	Salary	2.4	−6	Construction	−2.4	−6
Khulna	−2.4	1	Public sector	0.8	−6	Trade, hotels, & restaurants	3.7	−13
Rajshahi	1.6	−5	Community sector	1.7	−3	Transportation, storage, & communication	−2.3	−8
Sylhet	5.3	−9	Private sector	3.4	−6	Finance, real estate, & business	2.9	−12
Education[e]			Self-employment	[0.0]	−10	Community & personal services	2.2	−4
No education	[0.0]	−8	Nonagriculture	[1.0]	−10	Agriculture	−0.2	−10
Incomplete primary	−3.5	−3	Individual	[1.0]	−11	Industry	−0.9	−6
Complete primary	−1.8	−4	Family	1.6	−18	Services	1.7	−8
Incomplete secondary	[0.2]	−4	Employers	[2.2]	−3	Skills		
Complete lower secondary	−1.6	−2	Agriculture	−0.7	−9	White collar, high skill	0.2	−1
Higher secondary	[−1.8]	−3	Subsistence	−4.1	−13	White collar, low skill	1.9	−8
Tertiary	[2.2]	−2	Market	−0.3	−7	Blue collar, high skill	2.4	−9
						Blue collar, low skill	−0.8	−7

Sources: Based on HIES 2000, 2005.

Note: Estimates are presented in brackets when the growth of mean income was of a different sign or was different by more than 3 percentage points from that of the median income. For some subcategories estimates may be unreliable owing to a limited number of observations. a. Annualized real earnings, in mean income per worker from all activities. b. Job type in main employment. See table 2.3 for definition of aggregates and categories. c. Sector of main employment. d. Poverty rates, from which changes have been computed, were adjusted for regional differences in prices. e. For working-age population only.

A 9-percentage-point decline in the poverty rate between 2000 and 2005 is impressive. Poverty fell in all quarters, although more in some than in others.[3] In general, the correlation between poverty reduction and growth in earnings is positive, even if this is not immediately evident from the tabulations. Nevertheless, there are some puzzling results that are difficult to explain, such as the strong decline in poverty at times of stagnating income in the case of the agricultural sector and the region of Dhaka.[4]

Decomposition of GDP per capita growth

A simple decomposition of GDP per capita growth provides a starting point for a more rigorous understanding of how economic growth translates into increases in productivity and employment, as well as how various sectors contribute to this growth.

On the aggregate level, GDP per capita can be written as

$$\frac{Y}{N} = \frac{Y}{E}\frac{E}{A}\frac{A}{N} \qquad\qquad \text{(Equation 3.2)}$$

or, equivalently, as $y = \omega * e * a$, where Y is total value added, E is total employment, A is total working population, and N is total population. Thus, ω would correspond to output per worker, e to the employment rate (within working-age population), and a would correspond to an inverse of the dependency ratio. It is thus straightforward to decompose the growth of output per capita into the respective components.[5]

Productivity growth can be further decomposed—into contributions from within-sector growth and intersectoral employment shifts—in the following framework

$$\frac{Y}{E} = \sum_{i=1}^{S}\frac{Y_i}{E_i}\frac{E_i}{E} \qquad\qquad \text{(Equation 3.3)}$$

or, equivalently, as $\omega = \sum_{i=1}^{S}\omega_i * e_i$, where i is a subscript for sectors. Thus $\omega_i = Y_i/E_i$ corresponds to output per worker (or productivity) in sector i, and $e_i = E_i/E$ corresponds to the share of sector i in total employment. In order to decompose this identity without a usual remainder, a Shapley decomposition[6] is applied to obtain the respective contributions $\bar{\bar{\omega}}_i$, $\bar{\bar{e}}_i$, in absolute terms (i.e., $\sum_{i=1}^{S}\bar{\bar{\omega}}_i + \sum_{i=1}^{S}\bar{\bar{e}}_i = \Delta\omega$), which are then scaled by $\Delta\omega$ to obtain the relative (percentage) values $\bar{\omega}_i$ and $\bar{e}_i$ (so that $\sum_{i=1}^{S}\bar{\omega}_i + \sum_{i=1}^{S}\bar{e}_i = 1$).

Values ω_i and e_i represent the marginal contribution to the observed change in mean GDP per worker of the respective labor market indicators (ω and e) in sector i, expressed as a fraction of the total change in average income per worker. The terms e_i are aggregated into $\sum_{i=1}^{S} \overline{e}_i$ to reflect how much of this growth was associated with intersectoral employment shifts. The terms ω_i can be interpreted as the contribution of the within-sector productivity increases to the total increase in productivity, although some caution is recommended.[7]

It is important to clarify the point that this analysis does not establish causalities; it merely decomposes an identity defined over a set of general equilibrium outcomes. Rather than reflecting a share of growth that is the result of changes in productivity and employment shares, it reflects a share of growth associated with or accompanied by these processes. Nonetheless, it is informative to discuss the results, which are presented in Figure 3.2. As mentioned, growth in Bangladesh has been accompanied by fairly robust employment creation, with 5.6 million new jobs added between 2000 and 2005. However, in per capita terms this employment growth was much less pronounced. The employment rate (the share of the working-age population that is employed) did not change, and there-

Figure 3.2   Decomposition of GDP Per Capita Growth, 2000–05

(a) contribution to changes in
    GDP per capita

(b) contribution to growth in
    GDP per worker, by sector

■ share of working-age population
■ productivity
□ employment (rate)

■ agriculture
■ industry
□ services
□ intresectoral flows
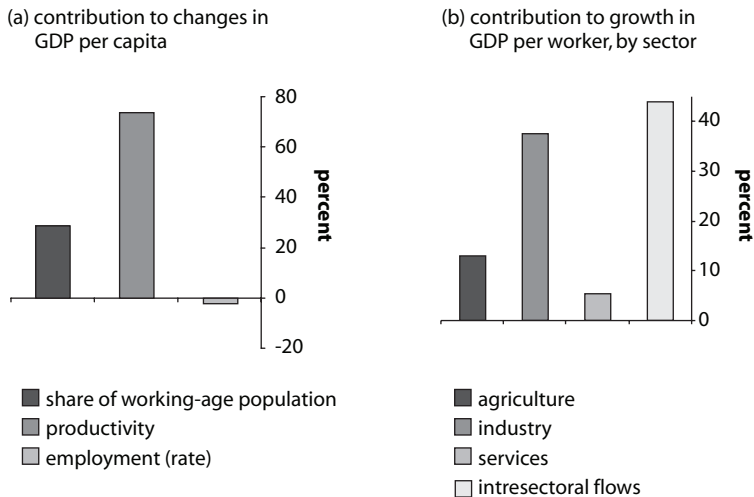
Sources: Based on HIES 2000, 2005.

fore its contribution to rising GDP per capita was close to zero. The entire contribution on the employment side came from the increase in the working population as a share in the total population (or, in other words, the decrease in the dependency ratio).

Consequently, increasing productivity (value added per worker) has been the key factor associated with the growth of total GDP per capita, accounting for as much as 75 percent of the total increase. Almost a half of the total productivity increase can be associated with intersectoral mobility of workers. The most important channel was the outflow of low-productivity daily wage jobs in agriculture to (mostly daily wage) jobs in services, a phenomenon related to migration from urban to rural areas and expansion of nonfarm employment. These jobs provided former agricultural workers with slightly better incomes. These results thus highlight the importance of services for future employment generation, GDP growth, and poverty reduction in Bangladesh.

At the level of broad economic sectors, productivity growth in industry was the strongest (figure 3.2) and accounted for most of that sector's contribution to income growth. Within industry, the manufacturing sector did not expand its employment, while its productivity component was robust. Taking into account the fact that Bangladesh's garment export will ultimately face increasing competition—owing to the expiration of favorable MFA quotas—it seems that the potential of manufacturing to further boost employment (as was the case in the past) should not be overestimated. Rather, further increases in productivity are necessary in the sector so that it continues to contribute to GDP growth. On the other hand, the construction sector, driven by ongoing urbanization, has been expanding its employment and has contributed positively to the overall increase in GDP per capita.

In agriculture, growth of productivity—contributing about 15 percent to the total productivity growth—is particularly important, as its current level in the sector is very low and, at the same time, the scope for a productive expansion of employment is limited.

In services, productivity grew more slowly than elsewhere, which is a typical finding. Strong inflows of workers from agriculture further contained increase in output per worker. On the other hand, the level of productivity in services continues to be the highest among all broad sectors.

Decomposition of poverty reduction by economic sectors

Once output growth has been decomposed into its employment and productivity components at the economy-wide and sectorwide levels, the next step is to check whether the poor have been able to benefit from the expansion of the growing sectors. This is potentially important, for example, because policy debate has been concerned with whether interventions should concentrate on increasing earnings in the sectors where the poor are found (such as agriculture) or whether they should be targeted to sectors where the poor are not found, so that more of the people in those sectors can be drawn into the higher-earning sectors (Fields 2006).

One way to perform this analysis is to decompose overall poverty reduction in Bangladesh over 2000–05 into changes associated with (i) changes in poverty within specific sectors (intrasectoral poverty changes), and (ii) changes in poverty due to changes in the share of the people "attached" to each sector (or, in other words, to intersectoral employment changes). The following framework is used:

(Eq. 3.4)

$$\Delta P = \sum_{i=1}^{S} N_{i,2005}\left(P_{i,2005} - P_{i,2000}\right) + \sum_{i=1}^{S}\left(N_{i,2005} - N_{i,2000}\right)\left(P_{i,2005} - P_{2005}\right)$$

where ΔP is a change in the overall poverty rate, $P_{i,t}$ is a poverty rate in sector i in year t, and $N_{i,t}$ is the share of poor households attached to sector i at time t. The expression on the left corresponds to a poverty reduction within sectors, while that on the right corresponds to a contribution of intersectoral changes.

Since such poverty decompositions are usually done at the household level, there is a need to determine the sectoral attachment of a household, which can be undertaken in several ways. For the analysis, a household is attached to a sector from which it derives most of its income.[8] In addition to using sectors, similar decomposition can be performed using job types. The results are presented in figure 3.3.

These results suggest that most of the poverty reduction between 2000 and 2005 took place within sectors. Services, which grew fastest, were associated the highest share of poverty decline. Despite its slow growth, agriculture's contribution was significant because of the size of the sector.

The importance of intersectoral flows was small, mostly because differences in poverty rates between sectors, and the magnitude of these intersectoral flows, are not very large. Nevertheless, the outflow from agriculture and the inflow into services played a role.

As regards job categories, the results are similar. Most of the poverty

Figure 3.3   Decomposition of Poverty Changes by Sector and Job Type, 2000–05
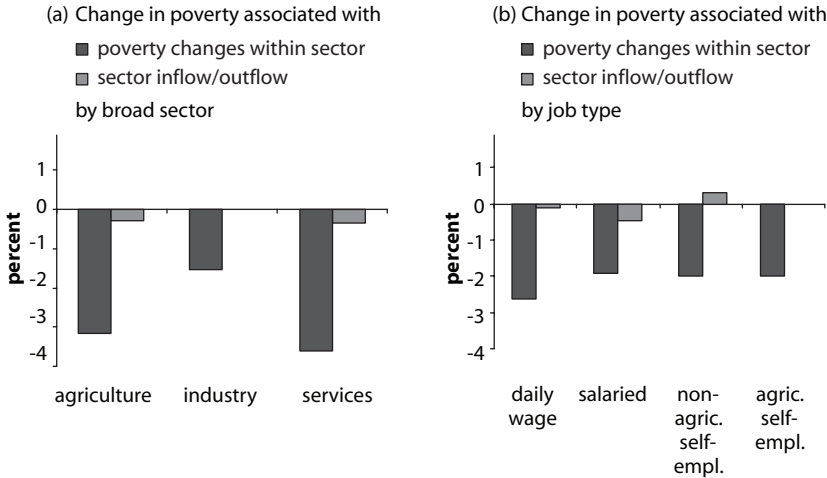
Sources: Based on HIES 2000, 2005.

reduction took place within categories, with comparable contributions from wage and nonwage employment. Inflows into salaried jobs played a small role as well.

In summary, the results of the decompositions suggest that productivity improvement and wage growth were key factors associated with income increases and subsequent poverty reduction between 2000 and 2005. Within agriculture, growth was the result of rising productivity and the outflow of people to other sectors. Within manufacturing, productivity was a key factor associated with the growth of income, while employment remained unchanged. This pattern is likely to continue, as Bangladesh's garment export is likely to be adjusting to international competition. As regards services, expanding employment in this sector has greatly contributed to increases in GDP per capita. It appears likely that services, particularly in the urban areas and in the private sector, have the potential to provide employment and income opportunities to many poor people.

Nevertheless, most of the poverty reduction occurred within economic sectors or job categories rather than through intersectoral flows, and within rural and urban areas rather than through migration. Therefore,

the thrust of the poverty reduction effort may need to remain for some time in areas where the poor are to be found, to and concentrate on promoting productivity growth where productivity and wages are low—while simultaneously trying to facilitate job creation in and inflows to sectors where productivity is high (suchh as services, but also manufacturing.

Notes

1. This number is consistent with similar estimates derived from the balance of payments and national accounts.

2. The adjustment by the average dependency ratio takes into account a worker's need to support other family members.

3. Except perhaps in Khulna, where it grew by 1 percentage point.

4. Inevitably, such puzzles are bound to arise, not least because poverty is estimated using other measures than income.

5. This can be done swiftly (and without a remainder) by taking logarithms of the latter equations for 2000 and 2005 and subtracting one from another. However, for the sake of consistency, a Shapley decomposition is used (see next paragraph), which yields similar results.

6. The Shapley decomposition approach is based on the marginal effect on the variable of interest of eliminating each of the contributory factors in a sequence. The method then assigns to each factor the average of its marginal contributions in all possible elimination sequences (Shorrocks 1999).

7. This term combines both increases in productivity that result from technological change or from the reorganization of the process of production and cyclical changes in demand. Firms operating below capacity in economic downturns may increase output when demand increases without additional adjustments. It will be recorded as an increase in productivity but in reality will not be accompanied by underlying changes to production technology.

8. It is important to note that many households have several sources of income. Therefore, if a household benefits from growth in a sector that is not its main source of income, the results will be biased. However, if the correlations in sectoral attachment among household members are small, it may be safe to assume that these biases will cancel out.

Labor Market: Selected Issues

This chapter presents several issues that are important to a better understanding of the functioning of Bangladesh's labor market and its link to poverty reduction. These issues are multiple income sources, labor market segmentation, self-employment, and inequality.

Multiple Income Sources

Multiple income sources and multitasking are very important phenomena in developing countries. First, earnings from other sources complement the income from the main activity and contribute to better living standards. Second, income diversification is a key insurance instrument for the poor. Not only households but also individuals often engage in more than one economic activity (multitasking). Although the tools available for this type of analysis are somewhat underdeveloped, this section attempts to provide a sketch of the situation in Bangladesh. The main figures are reported in Table 4.1.

Households with multiple sources of income are relatively common in rural Bangladesh, where most households top up their earnings from agriculture with income from other activities.[1] Sending household members

Table 4.1 Multitasking and Income Diversification, 2000 and 2005

percent

	Households								Individuals[a]		
	Urban				Rural				with two or more jobs (by main activity)		
	Share of households, by main activity, that have a secondary activity in...										
Main activity	Daily wage	Salaried job	Nonagric. self-empl.	Agric. self-empl.	Daily wage	Salaried job	Nonagric. self-empl.	Agric. self-empl.	Urban	Rural	Total
Daily wage	—	17	7	36	—	4	4	76	25	48	44
Salaried	5	—	8	18	11	—	8	76	10	31	20
Nonagriciculture self-employed	5	17	—	28	11	7	—	79	19	49	38
Agriculture self-employed	11	10	13	—	19	7	10	—	16	18	18
Total									16	36	31

Sources: Based on HIES 2000, 2005.

a. This analysis is based on a 12 month recall period, and thus the reported activities need not be simultaneous.

to daily wage jobs or engaging in some sort of self-employment are popular diversification strategies. In cities, diversification is less common, and salaried employment is an important option.

One reason for the lower-than-potential diversification is the traditionally low labor market participation of women. As a result, single-earner households are prevalent, accounting for 30 percent of all households, 40 percent of all urban households, and 75 percent of all households with exactly two members of working age.

Regarding multiple job holders, 16 percent of workers in urban areas and 36 percent of workers in rural areas were engaged in two or more economic activities in 2005. These ratios are stable over time. Daily wage workers and the self-employed outside of agriculture are more likely to hold two or more jobs, while women are less likely to do so. Again, mixing agricultural income with other employment is the most common situation, and were it not for these agricultural activities, multitasking rates would be as low as 8 percent. Indeed, on average, as much as 90–95 percent of individual income is derived from the main source.

Labor Market Segmentation

Much of the theoretical literature on labor markets in developing countries has in common that it emphasizes the segmentation of labor markets. In segmented markets, labor mobility is constrained because of institutional or other barriers, which results in different returns to labor in different segments and produces inefficiencies. Within the context of shared growth, segmentation in the labor market is important insofar as it may limit the access of certain groups to productive employment, exacerbate inequalities and poverty, and reduce the capacity of the poor to benefit from growth. Although there is disagreement on whether a segmented labor market is a true model, there seems to be a consensus that different parts of the labor market may follow their own dynamic and that movement between these segments may be limited.

To begin with, Bangladesh is fortunate in that it is very homogeneous, both socially and geographically. Therefore, in principle there are no major obstacles to labor market integration.

In general it is difficult to prove segmentation rigorously, because it is impossible to control for all of the factors, observed and unobserved, and rule out all competing hypotheses. The most straightforward evidence consistent with (but not equivalent to) segmentation is that returns to

Table 4.2   Earning Function in Bangladesh, 2000 and 2005

Coefficients from regression of log monthly earnings from main employment[a]

			2005									
	2000	*2005*	*All workers*	*Daily wage*	*Salaried job*	*Of which public sector*	*Nonagric. self-empl.*	*Agric. self-empl.*	*Men*	*Women*	*Urban*	*Rural*
Salaried job			0.335	—	—	—	—	—	0.274	0.474	0.120	0.384
Nonagric. self-empl.			0.416	—	—	—	—	—	0.439	0.281	0.355	0.397
Agriculture self-empl.			−0.284	—	—	—	—	—	−0.177	−1.149	−1.069	−0.191
Age	0.062	0.058	0.057	0.040	0.078	0.060	0.050	0.053	0.062	0.052	0.057	0.056
Age squared	−0.001	−0.001	−0.001	0.000	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001	−0.001
Woman	−1.113	−0.960	−0.967	−0.849	−0.388	−0.164	−0.908	−1.630	—	—	−0.657	−1.107
Years of education	0.058	0.059	0.050	0.021	0.068	0.065	0.057	0.032	0.047	0.065	0.072	0.038
Muslim[b]	−0.006	0.007	0.020	0.108	0.140	0.168	0.084	−0.214	0.063	−0.129	0.082	0.011
Married	0.088	0.101	0.110	0.129	0.042	0.017	0.137	0.071	0.109	−0.056	0.212	0.059
Public sector job	0.371	0.497	0.347	—	0.241	—	—	—	0.290	0.492	0.162	0.481
Urban job	0.418	0.351	0.187	0.234	0.097	0.057	0.325	−0.396	0.178	0.133	—	—
Regional dummies	Included, output suppressed[c]											
R-squared	0.347	0.295	0.344	0.282	0.455	0.427	0.299	0.256	0.283	0.398	0.428	0.293

Sources: Based on HIES 2000, 2005.

Note: — = not included in the regression. a. Regression is not corrected for potential selection bias. b. All coefficients listed are statistically significant at 1 percent, except "Muslim" (which is not significant anywhere, except in salaried jobs and in urban areas and for men, where it is significant at 5 percent). c. Base category is Barisal. Regional dummies in main regression vary between −0.18 and 0.20. Chittagong has a consistently positive premium of about 20 percent (over Barisal).

individual characteristics (labor, human capital. etc.) are not equalized between segments. The most common way of checking for that is to estimate earnings equations for different submarkets, compare the coefficients and test whether they are different from each other. Table 4.2 presents results of such regressions.

The returns to an additional year of education are, on average, 6 percent. They are higher for women, which probably reflects the relative scarcity of education within this group.[2] The returns are also lower in rural areas, where the prevailing production techniques do not reward skills very highly. They are particularly low for the daily labor sector, reflecting the commodity character of labor exchanged in this segment of the market.

Women are at a significant disadvantage in the labor market, earning as much as 60 percent less than men in the same type of work. Obviously, a much more sophisticated analysis than this one is needed to attribute these results to discrimination. It is important to note that women have significantly better opportunities in urban areas and in salaried employment, particularly in the public sector jobs. Therefore, the current urban shift provides a chance for women to take part in productive employment on better terms.

Differences between the divisions in terms of the returns to labor exist but are not particularly striking (regional premiums in the regression vary by about 15 percent around the national average). Chittagong has a consistently positive premium of about 15 percent. Differences from the national average in the returns to education are not statistically significant for most individual divisions, except for predominantly rural Sylhet (where they are lower) and for Khulna (where they are higher).

Public sector jobs carry a consistent positive premium, and the structure of salaries in this sector is flatter than average. The public sector premium is significantly higher for women, or in other words, women's disadvantage in the public sector is much smaller than elsewhere in the labor market. Public sector premium is also higher in rural areas, where government jobs are much less prevalent. Nonfarm employment offers a sizable premium over daily labor and agricultural self-employment.

Overall, the analysis suggests that different labor markets operate in urban and rural areas. Moreover, income determination differs between men and women. The public sector seems to have its own wage function, while daily wage employment and agriculture self-employment are low-return sectors. However, the differences between these markets do not

Table 4.3 Income Sources in Urban and Rural Areas, 2000 and 2005

	Urban Areas					Rural Areas				
	Income[a]		Share of total income (%)	Share of labor income (%)	Annualized real growth[b]	Income[a]		Share of total income (%)	Share of labor income (%)	Annualized real growth[b]
	2000	2005				2000	2005			
Total income[a,c]	1,631	2,124	100	-	7.0	847	1,141	100		− 2.1
Labor income	1,211	1,627	77	100	7.7	630	825	72	100	1.5
Daily wage	149	170	8	10	4.2	156	202	18	24	1.2
Agriculture	16	28	1	2	n.a.	91	96	8	12	−2.7
Nonagriculture	133	141	7	9	2.8	65	106	9	13	5.8
Salaried employment	485	675	32	41	8.4	102	169	15	21	6.3
Nonagriculture self-empl.	534	707	33	43	7.3	171	189	17	23	−1.8
Agriculture self-empl.	43	76	4	5	13.5	201	265	23	32	1.6
Subsistence	6	10	0	1	n.a.	42	44	4	5	−3.2
Market	38	66	3	4	13.4	159	221	19	27	2.8
Nonlabor income	420	497	23	—	5.0	216	316	28	—	3.8
Property	168	173	8	—	2.1	46	49	4	—	−2.5
Social and charity	13	15	1	—	n.a.	11	14	1	—	n.a.
o/w selected govt. progs	0	1	0	—	n.a.	3	2	0	—	n.a.
Remittances	105	121	6	—	4.5	94	145	13	—	5.0
o/w from abroad	74	87	4	—	5.0	66	106	9	—	5.8
Other	135	187	9	—	8.4	66	108	9	—	6.2
Memo items										
Poverty rate (%)	35.1	28.4	—	—	1.8	52.3	43.8	—	—	−2.8
Inequality (Gini coeff.)	0.372	0.365	—	—	-	0.279	0.284	—	—	—
Average level of education[d]	5.7	6.4	—	—	0.7	3.2	3.7	—	—	0.5

Sources: Authors' calculation based on HIES 2000, 2005.

Note: — = insufficient observations; n.a. = not sufficient data. a. Expressed in Tk/month per capita (in total population within urban and rural areas). b.For income aggregates, real growth of total income originating in a category (within urban and rural areas); for poverty rate, growth of the total number of the poor; for education level, absolute change over five years. c. See table 2.3 for definition of aggregates and categories. d. In years, working-age population, change between 2000 and 2005 expressed in absolute terms over five years.

appear to be striking. And labor flows between job categories and from urban to rural areas suggest that a significant scope for mobility remains.

Rural and Urban Bangladesh

A division between the urban and rural areas has been identified as a defining characteristic of the labor market in Bangladesh. This section takes a look at how income generation differs between these areas. Table 4.3 provides key evidence.

About 61 percent of labor income in 2005 originated in rural areas, where 75 percent of workers reside. This ratio declined from 68 percent in 2000. Nonlabor income in rural areas has been expanding faster than labor income, with foreign remittances growing by 6 percent per year.

There has been a decisive shift in rural areas, away from low-productivity daily wage work in agriculture (the total income from this activity was actually falling by 2.7 percent per year in real terms over 2000–05), and a move into daily wage work outside of agriculture and into salaried employment (both recorded about a 6 percent annual increase in income). More agricultural income is channeled through the market, and the extent of subsistence agriculture is gradually declining.

In 2005, the rural nonfarm sector surpassed agriculture as a main source of income in rural areas. Indeed, this sector plays a very important role—for example, poverty rates among households in this sector are as much as 10 percentage points lower than for the rest of the rural population. Between 2000 and 2005, the nonfarm sector continued its expansion. The share of rural households engaged in activities outside of agriculture grew from 49 percent to 54 percent over the period, and the share of income from these activities grew from 50 percent to 55 percent. However, in contrast to previous decades, this change came about in large part through the expansion of salaried employment rather than individual self-employment (in which area incomes and employment appear to have been declining). The rural nonfarm sector is expected to grow in importance, since the availability of land for cultivation is already constrained (and is actually falling because of erosion).

In urban areas, labor income has been expanding rapidly (by 7.7 percent per year in total income or 1.3 percent in per capita terms). Salaried employment, particularly in the private sector, was a key driving force. Still, self-employment remains the main source of income and is expanding equally rapidly.

Overall, income generation in rural areas has kept up relatively well, thanks to the expansion of nonfarm activities, often in the salaried sector. However, the lion's share of growth is taking place in urban areas, where both salaried employment and self-employment are growing.

Women and Children in the Labor Market

The segmentation between men and women is another defining characteristic of employment in Bangladesh. This section takes a look at how women fared in the labor market in the period 2000–05. Table 4.4 provides key evidence.

As has been mentioned, women's participation in the labor market is strikingly low. The reasons behind this situation are complex, ranging from tradition, to the low bargaining power of women within households and society, to the physically demanding nature of work in Bangladesh (construction and harvesting).

Nevertheless, women have been the most dynamic segment of the labor market in recent years. During the period 2000–05, female employment was growing at 4.3 percent per year and, in absolute numbers, increased from 4.4 million to 5.4 million, that is, by about a million. Women are increasingly better educated, and the gap between women's and men's education is gradually narrowing.

Figure 4.1   Sources of Growth, Women's Income, 2005

Contribution to changes in income per person, women
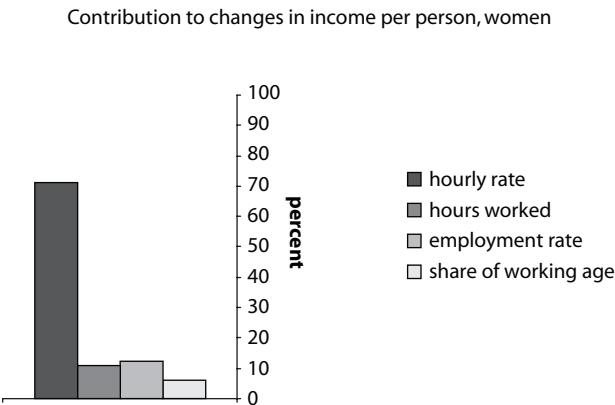
Source: Authors' calculation based on HIES 2005.

Table 4.4   Women in the Labor Market, 2000 and 2005

	Men			Women		
	2000	*2005*	*Annualized real growth (%)[a]*	*2000*	*2005*	*Annualized real growth (%)[a]*
Labor force (working-age population)						
Employment rate (%)	82	82	2.6	11	12	4.3
Average years of education	4.5	5.1	+0.5[b]	2.9	3.8	+0.9[b]
Earnings and hours						
Median earnings (Tk/month)	1,918	2,398	-0.1	625	1,000	4.9
Median hourly rate	9.4	11.8	0.0	4.4	6.9	4.6
Hours worked weekly	49.5	47.6	−1.9[b]	40.1	43.6	+3.5[b]
Sectors (%)						
Agriculture	52	47	0.4	41	39	3.5
Industry	21	22	3.8	32	32	4.8
Services	27	31	5.5	27	28	5.0
Job types (%)						
Daily wage	33	32	2.3	33	26	−0.7
Salaried	18	20	4.5	35	36	4.8
Nonagriculture self-employment	22	20	1.0	10	13	10.2
Agriculture self-employment	27	28	2.9	22	25	7.5
Income shares[c]	**713**	**955**	**3.2**	**35**	**68**	**11.6**
Daily wage	146	183	1.8	8	11	2.2
Salaried	161	254	6.6	18	41	14.8
Nonagriculture self-employment	240	307	2.3	4	10	18.0
Agriculture self-employment	165	211	2.3	5	7	6.8

Sources: Authors' calculation based on HIES 2000, 2005.

a. Of total (not per capita) income generated by men and women, respectively. b. Absolute change over five-year period. c. Total income earned by men and women, respectively, expressed in Tk per month per person in total population (that is, divided by the total population of Bangladesh).

The total income generated by women has been growing at 10 percent a year. What has the source of this increase been? Women have increased their employment rate slightly and hours of work significantly, by 3.5 hours per week, compared with a decline for men of 1.9 hours. The median hourly rate grew by 4.6 percent a year, compared with a stagnation in men's wages. Figure 4.1 presents the relative contributions of these factors (from a decomposition similar to that in chapter 3). Wages seem to have played a key role, but employment has contributed as well.

Women are relatively uniformly distributed among the broad economic sectors, and this distribution has been stable.

Sixty percent of new jobs for women were created in urban areas. Half of the employed urban women can be found in salaried employment in the private sector, frequently in the textile and apparel industry. This sector was booming throughout the 1990s, providing jobs for over 1 million women. However, between 2000 and 2005, most of the employment growth came from other quarters. First, the public sector has been actively recruiting women (as teachers, for example), and second, their participation in self-employment, particularly as members or owners of household enterprises, has been expanding rapidly (10 percent per year, although from a very low base). These two sources contributed about 30 percent each to the total growth in urban female employment.

In rural areas, low-productivity daily wage work or agricultural self-employment are the main sources of employment for as much as two-thirds of all working women. To a lesser extent, trends can be seen that point toward more jobs for women in the public sector and self-employment outside of agriculture (as well as to a reduction in engagement in daily labor).

How important is the position of women in poverty reduction? First, despite all the present dynamism, women accounted for only 6.7 percent of total labor income in 2005 (up from 4.5 percent in 2000). Women contributed only 12 percent to the incremental growth in that income, and filled only 20 percent of the 5.6 million new jobs generated between 2000 and 2005. Nevertheless, taking away women's income would increase the poverty rate by 5 percentage points (from 40 percent to 45 percent, compared with a 3-percentage-point increase if the same amount of income was taken from everyone equally). Finally, and perhaps unfortunately, most of this improvement in women's labor market participation took place in the middle range and at the top of the income distribution.

In Bangladesh it is relatively common for children to spend some of their time in household work helping their families. Various surveys, such

as the Labor Force Survey, estimate that as many as a quarter of all children are economically active, and the majority of those are unpaid family workers (Salmon 2005). However, the HIES provides information only on children ages 5–14 who are working for remuneration (including work in household self-employment, when reported).

According to this definition, about 4 percent of children ages 5–14 work for money and make up about 3 percent of all workers in Bangladesh. About 80 percent are boys and about 80 percent are over 11 years old. Unfortunately, only 10 percent attend school—to the detriment of their education and future labor market options.[3] Child workers can be found disproportionately in wage employment in the private sector (24 percent), as daily labor outside of agriculture (22 percent), or in family businesses (11 percent). No particular difference in the prevalence of child remunerative work is observed between rural and urban areas.

Although children work almost as much as adults, their earnings are only about 40 percent of the typical adult's earnings. This is because their wage rates are much lower: 70 percent lower in private sector wage employment, 50 percent lower in daily work outside of agriculture, but only 20 percent lower in daily wages in agriculture.

Children's income is important in that almost all of these children live in and contribute to poor households. About 40 percent of them, together with their families, would live in poverty were it not for their work. Furthermore, 55 percent of them still live in poverty, despite working. Overall, the poverty rate would have been 2 percentage points higher if their income were taken away.

Self-employment

Self-employment in Bangladesh accounts for half of the total work income and half of employment. Yet, because self-employment does not lend itself easily to analysis, it remains poorly understood.[4] This section provides some basic statistics on self-employment and household enterprises in Bangladesh.

Self-employment in agriculture

About 70 percent of households in Bangladesh have some sort of agricultural income,v and 45 percent have crop production income. The extent of noncrop activities appeared to have increased between 2000 and 2005 (some of this increase could be an artifact of survey methodology), while the share of crop-producing households remained unchanged.

Figure 4.2   Structure of Agricultural Production, 2005
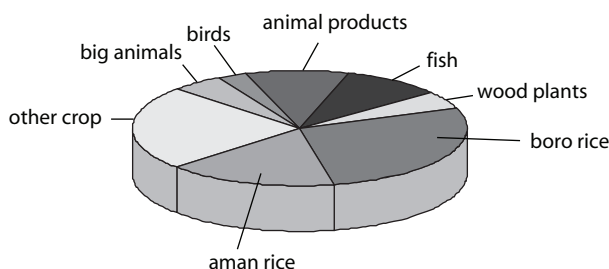
Source: HIES 2005.

The structure of agricultural production is presented in figure 4.2. Households cultivate mostly two types of rice, boro and aman, which account for two-thirds of total production. The dry-season boro rice has been instrumental in boosting agricultural income over recent decades and is now established as by far the most important crop.

Agricultural production is gradually becoming more market based. Between 2000 and 2005 the share of self-consumption fell from 46 percent to 42 percent of total production. In addition, wages and land rents are increasingly being paid in cash rather than in kind (30 percent of production costs were paid in kind in 2000, compared with 22 percent in 2005). The extent of subsistence agriculture is very gradually declining.

There appears to have been some diversification, albeit slow, in agricultural production. For example, the share of the five largest crops fell from 81 percent to 77 percent. And the share of noncrop income increased from 29 percent to 32 percent, with fish production growing at a fast rate.

Table 4.5 presents results of the estimation of the profit function of agricultural enterprises in Bangladesh. It is evident that the returns to education are very low, which suggests that the underlying technology does not require a sophisticated knowledge input. Adding another person to an enterprise (which are predominantly single-person) increases income by about 25 percent. Finally, endowment in assets, particularly land, is strongly related to agricultural income. Namely, doubling assets is associated with a 25–55 percent increase in profit for the enterprise. This suggests that the marginal returns to capital are high in rural Bangladesh.[6]

Household enterprises outside of agriculture

Between 2000 and 2005, the average number of enterprises outside of agriculture, per household (including the individual self-employed), fell by some 10 percent, and this decline was more pronounced in rural areas. In cities, a robust growth in population and in income per household enterprise more than offset this decline, so that, on balance, the total income from this source grew by more than 7 percent per year (table 4.3). Rural areas saw a general decline in business income.

About 80 percent of household enterprises are individual self-employed, and about 90 percent of them cater predominantly to individuals. A breakdown of revenues and expenditures (see figure 4.3) reveals that the main cost item is goods for resale, which indicates that many of these enterprises are engaged in small-scale trading. Net revenues are about 20 percent of gross revenues, and outlays for wages are small.

Earnings in the self-employment sector compare favorably with wages in salaried employment, as evidenced by table 4.2. Thus, it would appear that self-employment does not constitute an inferior sector in Bangladesh, contrary to the way it is regarded in some other countries.

Table 4.6 contains estimations of the profit function of household enterprises. Employers, urban enterprises, and firms patronized by the

Table 4.5   Profit Function of Agricultural Enterprises,[a] 2005

Regressors	Coefficient
Education[b]	0.022
No. of household members	0.261
Land in operation	0.549
Animal assets[c]	0.217
R-squared	0.505

Source: HIES 2005.

a. Coefficients from a regression of log net income from agriculture. All variables are in logarithms except education and market access; all coefficients listed are statistically significant at 1 percent. b. Average years of education of members. c. Value of animals.

Table 4.6   Profit Function of Household Enterprises[a] (nonagricultural), 2005

Regressors	Coefficient
Education[b]	0.037
Urban	0.188
New firm[c]	−1.268
Government as main customer	0.320
No. of household members[d]	0.459
Employer[e]	0.606
Phone	0.704
Electricity	0.329
R-squared	0.344

Source: HIES 2005.

a. Coefficients from a regression of log net income from nonagricultural household enterprises. All coefficients listed are statistically significant at 1 percent. b. Average years of education of members. c. Operating less than a year. d. Logarithm. e. Enterprise employing workers from outside the household.

Figure 4.3   Use of Revenues in Household Enterprises (nonagricultural), 2005
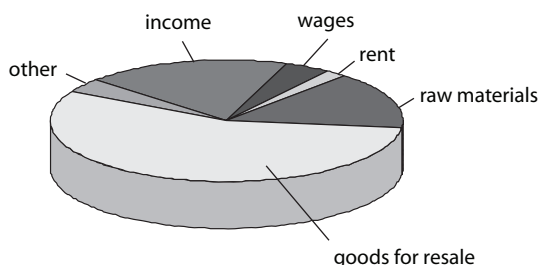
Source: HIES 2005.

government enjoy a significant premium. The rewards to education are close to the average. The marginal returns to labor are higher than for agricultural enterprises. Finally, access to infrastructure greatly enhances the productivity of enterprises.

The HIES does not ask entrepreneurs about their capital or assets, but it does ask about the value of their enterprises. It turns out that this value is strongly related to the education of enterprise members (with a correlation coefficient of 0.50),[7] providing further evidence of the importance of human capital.

With the doubling of microcredit in Bangladesh over the period of interest, it would be rational to expect the number of enterprises and their incomes to grow. However, as has been discussed, the data do not appear to support this hypothesis very strongly. One reason why the share of self-employment has been falling is the simultaneous outflow from low-productivity individual self-employment to salaried employment.

However, there are several areas in which growth has taken place. For example, family enterprises appear to have grown in significance, particularly in urban areas. More important, women are increasingly taking part in household businesses. The share of firms with female members grew from 5 percent to 9 percent between 2000 and 2005 (table 4.7). Finally, the share of businesses using formal channels as a source of financing increased by over half, from 8 percent to 14 percent over the period. The two latter phenomena are linked, since women are somewhat more likely to use formal channels as primary sources of financing, which may be

Table 4.7   Household Enterprises, Finance, and Women's Participation, 2000–05

	Finance type[d]		Female participation[a]	
	2000	*2005*	*2000*	*2005*
Informal[b]	97	91	5	8
Formal[c]	8	14	6	12
All	100	100	5	9

Sources: HIES 2000, 2005.

a. Share of firms with female participation, by primary source of financing. b. Own savings; inherited; gift; borrowing from relatives, friends, or a moneylender; or sale of assets. c. Agricultural development bank or commercial bank, Grameen Bank, NGO. d. Share of nonagricultural household enterprises using given type of financing.

a consequence of the gender preference of microcredit schemes in Bangladesh.

Despite the improvement, credit remains a problem in Bangladesh. The majority of enterprises still use their own savings (70 percent), inheritance or gifts (15 percent), and borrowing from family or friends (5 percent) to finance their activities. A major problem reported by about half of entrepreneurs is inadequate capital or credit, which may reflect low physical and financial assets in this sector.

Inequality

Although all of the measures of income inequality increased, consumption inequality did not change between 2000 and 2005. This suggests that certain mechanisms are in place that prevent the automatic transmission of inequalities from income to consumption.

The growth incidence curve in Figure 4.4, which tracks the growth of consumption along the initial distribution of consumption, shows that improvement was relatively uniform. If anything, consumption grew somewhat faster for the lowest and the highest deciles. Thus, the growth process was generally favorable to the poor.

However, more important for the poverty outcome in Bangladesh are inequalities in the distribution of human and physical capital (figure 4.4 and table 4.8). The poverty rates are highest for the landless and those with no education. Gini coefficients for the distribution of productive assets are in the range of 0.6–0.9. Thus, improving the distribution of assets is likely to contribute to poverty reduction.
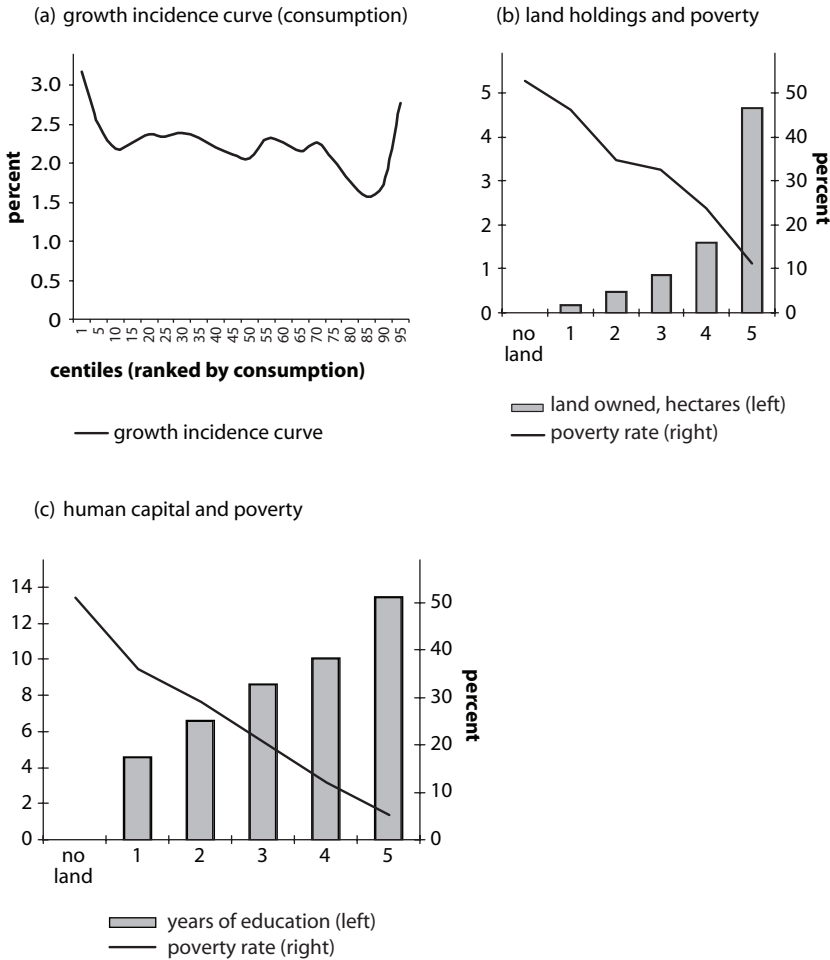
Table 4.8. Inequalities, 2000–05

Inequality Dimensions	Gini coefficient	
	2000	*2005*
Work income (individuals)[a]	0.487	0.504
Work income (households)[a]	0.436	0.471
All income	0.411	0.454
Consumption[a]	0.334	0.332
Land assets (crop)[b]	0.647	0.655
Land assets (all)[c]	0.796	0.781
Business assets[d]	0.884	0.877
Years of education[e]	0.631	0.569

Sources: HIES 2000, 2005.

a. Work income inequality changes and consumption inequality changes are not statistically significant at 95 percent. b. Among crop-producing households in rural areas. c. Among all households in rural areas. d. Among households with household enterprises or self-employment outside agriculture; uses self-reported value of the enterprise. e. Of working–age population.

Notes

1. This analysis is complicated by the fact that as much as two-thirds of households, some of them in urban areas, report income from agriculture. Some of this income might be in kind and insignificant (such as a fish caught from a river).

2. A finding of higher returns to education in the case of women is typical in many countries and markets.

3. It is not clear whether they drop out as a result of the need to work or as a result of the low quality of the available education options and the low perceived value of this education.

4. The problems include underreporting or misreporting of earnings, problems in dealing with negative income, difficulties in defining time spent working (and, hence, the wage rate), accounting issues (for example, problems in calculating net income), ambiguity about how to distribute the income of the household enterprise among the members, among other problems.

5. For about 10 percent of these households the only agricultural income is small-scale self-consumption (for example, fish caught in a river). See box 1.1 for a discussion of the consequences for this analysis of how agricultural income has been recorded.

6. Again, because the conditions necessary for causal inference have not been established, these results should be interpreted as a statistical association rather than as causal relations.

7. Including this self-reported enterprise value in the regression wipes out the significance of the education variable.

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Poor people derive most of their income from work. However, there is insufficient under-standing of the role of employment and earnings as a link between growth and poverty reduction, especially in low-income countries. *The Making Work Pay* series analyzes the important roles of labor markets, employment, productivity, and labor income in facilitating shared growth and promoting poverty reduction.

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